

Fundamental Research on School Facilities for Building an Inclusive Education System

(Report)

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Research Representative Fukuei Saito (April 1, 2014 to March 31, 2015)

Research Representative Takeshi Isoyama (April 1, 2015 to March 31, 2016)

(Director, Educational Facilities Research Center, National Institute for Educational Policy Research)

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Introduction

This report represents a summary of the outcomes of the Fundamental Research on School Facilities for Building an Inclusive Education System project research carried out by the National Institute for Educational Policy Research from FY2014 to FY2015.

According to Article 24 of the Convention on the Rights of Persons with Disabilities, an Inclusive Education System is a system whereby persons with disabilities and persons without disabilities learn together, where persons with disabilities must not be excluded from the general education system, must be given opportunities in primary and secondary education in the community where they live, and reasonable accommodation required of individuals must be accessible.

The report of the Central Council for Education's Subdivision on Elementary and Lower Secondary Education released in July 2012 indicated efforts should be made wherever possible so that infants/pupils/ above Kindergarten, primary school, Junior high school students with disabilities and infants/pupils/students without disabilities learn together at the same location and indicated that development of an environment to enable such learning is necessary. In particular, with regards to the new concept of "reasonable accommodation," the report stated the need to carry out research on enhancing reasonable accommodation, for the national government to develop a database on reasonable accommodation, and for this database to be provided as reference to establishers and schools.

Additionally, the Act on the Elimination of Disability Discrimination that took effect on April 1, 2016 obligates the national government and local governments to provide reasonable accommodation.

In terms of school facilities, reasonable accommodation based on the type of disability must be provided to infants/pupils/students with a disability in their use of general school facilities, including ordinary classrooms at public elementary and junior high schools. Based on such trends, this research conducted a questionnaire and onsite survey, as well as interviewed school officials, at schools that were adopted for the Ministry of Education, Culture, Sports, Science and Technology (MEXT)'s Model Project for Inclusive Education System Development, in order to gain basic knowledge concerning reasonable accommodation and improvement of the basic environment, which serves to underpin reasonable accommodation. This research also analyzed and organized case studies from this program.

The first chapter of this report discusses the background of this research and the basic concept behind inclusive education systems. The second chapter provides the analysis results of reasonable accommodation and improvement of the basic environment with regards to school facilities/equipment based on the questionnaire, and then introduces precedent case studies. The third chapter provides a summary of points of caution with regard to the provision of reasonable accommodation in terms of school facilities/equipment. Case studies found during the research have been compiled into a database for the benefit of users.

I would like to take this opportunity to extend my deepest appreciation for the extensive cooperation and assistance provided by boards of education and schools targeted in this research. It is my hope that this report can be used as reference material when examining school facilities for building an inclusive education system.

March 2016

Research Representative Takeshi Isoyama
Director, Educational Facilities Research Centre,
National Institute for Educational Policy Research

Chapter 1 – Background and Objective

1-1 Background and Objective

In 2007, Japan signed the Convention on the Rights of Persons with Disabilities (below, “the Convention”), which was adopted by the United Nations one year prior, and later Japan moved forward with the development of relevant domestic legislation and ratified the Convention in January 2014. According to Article 24 of the Convention, an Inclusive Education System is a system whereby persons with disabilities and persons without disabilities learn together, where persons with disabilities must not be excluded from the general education system, must be given opportunities in primary and secondary education in the community where they live, and reasonable accommodation required of individuals must be accessible.

As part of its initiatives aimed at building an inclusive education system, Japan revised the School Education Act in June 2006 and starting from FY2007, Japan changed its school system for the disabled to special needs education schools that transcend schools focused on specific types of disabilities, such as those for the visually impaired, hearing impaired, or the physically disabled, so that the appropriate instruction and required assistance for the educational needs of every individual pupil/student can be provided based on the severity or multiplicity of their disability.

After this change, special needs education schools have worked to establish systems for providing appropriate instructions and necessary assistance for improving or overcoming living and learning difficulties by understanding the educational needs of each individual pupil/student and heightening their inherent abilities. These schools have also made progress with school-to-school collaboration and enhanced their functions as a special needs education center for their local community.

MEXT revised the Course of Study for special needs education schools in March 2009 and revised the Guidelines for Designing School Facilities for Special Needs Education in March 2011 (final revision: July 2014) in order to accommodate changes in social environment and the advancement of initiatives

post system changes. Based on these revisions, MEXT released “A Collection of Exemplary Design of School Facilities for Special Needs Education” in May 2013, which contains a collection of commentary about the major revisions to the Guidelines for Designing School Facilities for Special Needs Education.

The report released from the Central Council for Education’s Subdivision on Elementary and Lower Secondary Education in July 2012 entitled “Promotion of Special Needs Education in Building Inclusive Education System for Formation of a Convivial Society” (below, “the Central Council Report”) defined the term “reasonable accommodation.” However, since “reasonable accommodation” is a new concept, the report stated, “understanding is lacking regarding efforts to ensure reasonable accommodation, and information is believed to be lacking among establishers, schools, pupils/students with disabilities, and guardians. Therefore, research projects should be carried out immediately to enhance understanding of ‘reasonable accommodation’ and the national government should create a database on ‘reasonable accommodation’ based on the results. In turn, this database must be provided as reference to establishers, schools, pupils/students with disabilities, and guardians. Additionally, using this database, it will be important to enhance ‘reasonable accommodation’ and ‘improvement of the basic environment’ over the medium to long term.”

The Central Council Report also recommended, “it would be appropriate that the conventional system for determining the school where children with a disability per the national standards and procedures of assignment for children with disabilities were required, in principle, to attend special needs education schools should be replaced with a system for determining the school from holistic perspectives based on the condition of the disability, the individual’s educational needs, the opinions of the individual and their guardians, the opinion of specialists in education, medicine and psychology, and the situation of the school and community.” Based on this, the prescribed revisions were made to the Ordinance for the Enforcement of the School Education Act in August 2013, and at present individual pupils/students with a disability are assigned a school by the board of education of the local municipality from a holistic perspective based on the condition of their disability and other factors.

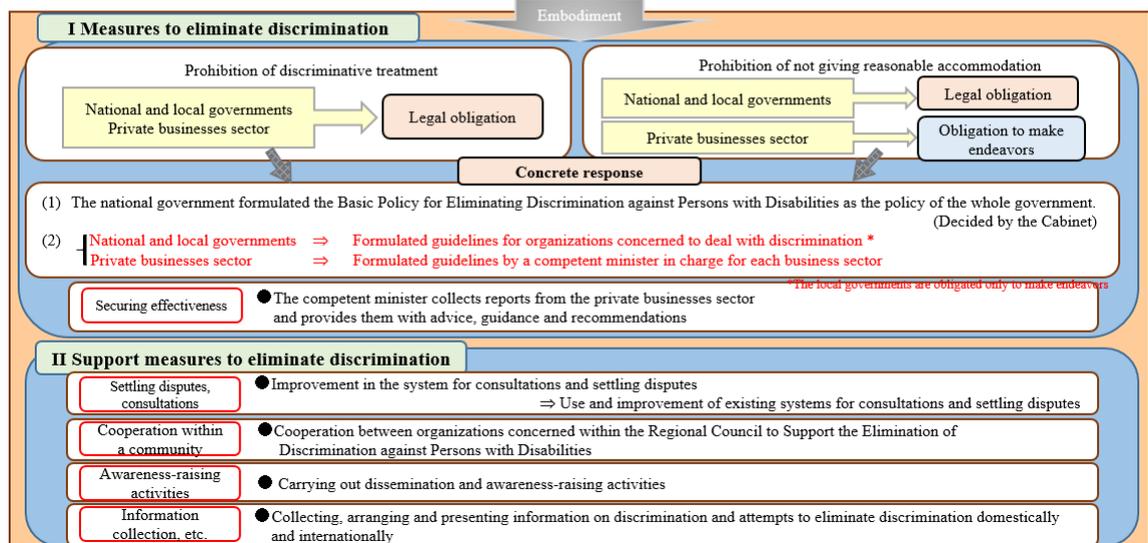
Additionally, the Act on the Elimination of Disability Discrimination (below, “the Act”) established in June 2013 legally obligates that administrative institutions (including public schools) provide reasonable accommodation and prohibit unjust discriminatory handling based on the public nature of their administrative and business operations and their leading position in eliminating disability discrimination. It also requires the heads of national administrative institutions and independent administrative institutions to establish response guidelines in order to ensure efforts are fully carried out by employees of the institution.

In preparing response guidelines by a local public body, the law obligates efforts be made based on the general concept of decentralization of power, but the national government, too, must cooperate with the preparation of these response guidelines by local public bodies, providing the required assistance measures, including timely provision of materials and information and technical advice.

In advance of the enforcement of the Act on April 1, 2016, few reviews have been carried out about pupils/students with a disability, who had previously attended a special needs education school, using general school facilities, including the ordinary classrooms of public elementary and junior high schools. Therefore, based on the aforementioned background concerning special needs education schools, this research first conducted a questionnaire and onsite survey concerning the methods of “reasonable accommodation” of school facilities based on the type of each disability in building an inclusive education system. The results of these will be compiled into a database and widely shared with all, while points of caution related to the provision of reasonable accommodation for school facilities/equipment will be compiled based on the basic knowledge gained from the results of analysis.

Outline of the Act for Eliminating Discrimination against Persons with Disabilities (Act for Eliminating Discrimination [2013 Act No. 65])

<p>Article 4, Basic Act for Persons with Disabilities</p> <p>Basic principle Prohibition of discrimination</p>	<p>Paragraph 1: Prohibiting behavior that violates rights, such as discrimination against people with disabilities</p> <p>No person shall discriminate against persons with disabilities, violate their rights, or harm their benefits because of disabilities.</p>	<p>Paragraph 2: Preventing violations of rights due to failure to eliminate social barriers</p> <p>If persons with disabilities who need the elimination of social barriers exist and the expenses for the elimination are not excessive, requisite and rational consideration needs to be given to such elimination in order not to violate the stipulation of the preceding paragraph by failure in such elimination.</p>	<p>Paragraph 3: National government's attempts to raise the nation's awareness and disseminate knowledge</p> <p>To raise the nation's awareness of the prevention of behavior that violates the stipulation written in Paragraph 1 and to disseminate knowledge, the national government shall collect, arrange and present information necessary for preventing such behavior.</p>
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Date of enforcement: 1 April 2016 (the necessary review will be considered over the next three years after enforcement) *Document prepared by the Cabinet Office

It is hoped that the outcomes of this research can be utilized effectively when local public bodies and other institutions draw up response guidelines and individual education support plans required as a specific response under educational policy so that pupils/students with a disability can be accommodated in school spaces considerate of their educational needs.

1-2 Definition of Reasonable Accommodation and Improvement of the Basic Environment

The Central Council Report defines reasonable accommodation and improvement of the basic environment as follows.

(1) Reasonable Accommodation

“Reasonable accommodation” refers to school establishers and schools making necessary and appropriate changes/adjustments in order to ensure that children with disabilities can benefit from and exercise their “right to receive an education” equally with other children. Such accommodation is required individually for each child with disabilities based on their condition when they receive school education, and does not place an excessive burden or loss of balance structurally or fiscally for school establishers and schools.

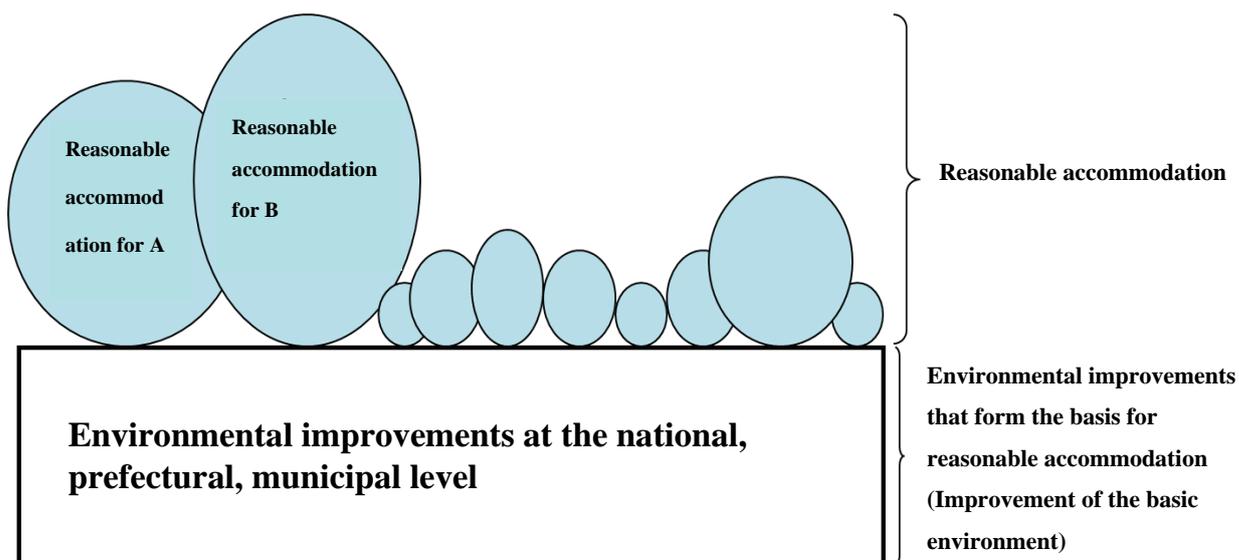
(2) Improvement of the Basic Environment

The national government is responsible for assisting children with disabilities and providing an educational environment on a nationwide level while prefectural governments are responsible for their own prefectures and municipalities for their own municipalities, based on laws and through fiscal measures. These actions represent the development of an environment that will form the foundation of “reasonable accommodation,” and this is in turn referred to as “improvement of the basic environment.”

These environmental improvements differ based on each situation, but based on these actions; establishers and schools provide children with disabilities “reasonable accommodation” at each school based on their condition.

It is important to provide “improvement of the basic environment” while also considering universal design.

◇Conceptual Diagram



*Source: "Promotion of Special Needs Education in Building Inclusive Education System for Formation of a Convivial Society," Central Council for Education's Subdivision on Elementary and Lower Secondary Education; July 2012.

(3) Relationship between Reasonable Accommodation and Improvement of the Basic Environment with regards to School Facilities

Reasonable accommodation at school facilities is required individually for pupils/students (individuals) to receive school education based on their condition. Improvement of the basic environment refers to improvement actions for many and unspecified pupils/students. Additionally, facilities/equipment developed initially as reasonable accommodation are, as time passes, utilized by many and unspecified pupils/students, which then transition to become improvement of the basic environment.

Chapter 2 – Status of Efforts concerning Facilities/Equipment

2-1 Questionnaire

(1) Objective

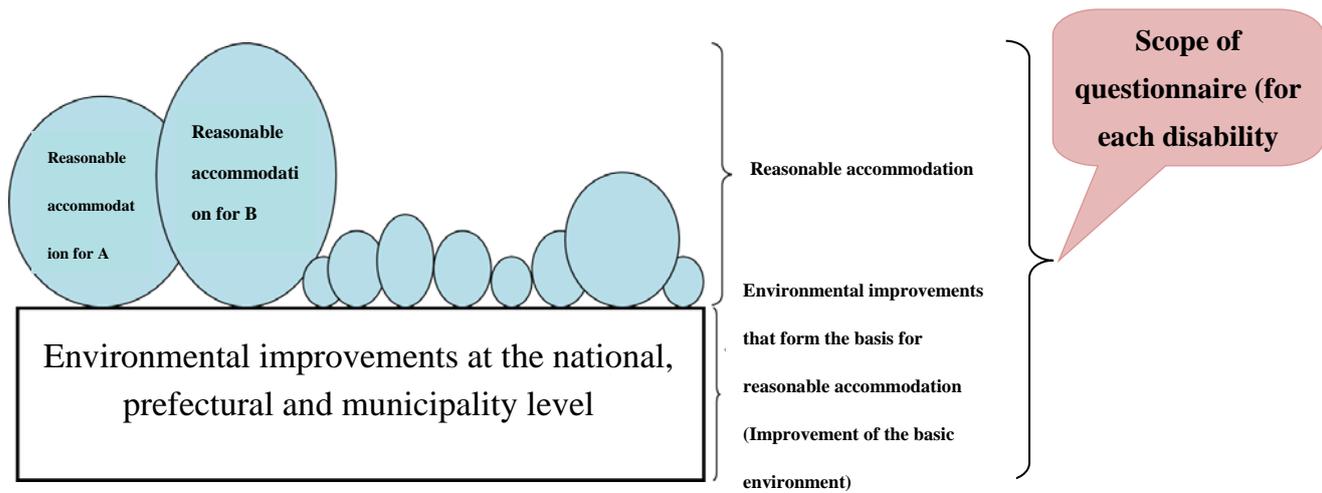
The objective of this research is to obtain basic knowledge about the types of facilities/equipment, installation location, costs, and other factors regarding methods of “reasonable accommodation” at school facilities installed based on each type of disability with the goal of building an inclusive education system and to create a database of this information.

(2) Subjects

This research was conducted on school establishers (boards of education, etc.), targeting database cases prepared in advance by the National Institute of Special Needs Education from among those 65 designated areas and schools adopted in MEXT’s FY2013 Model Project for Inclusive Education System Development.

(3) Details

A questionnaire was conducted regarding the details of efforts in terms of “reasonable accommodation” and “improvement of the basic environment” concerning facilities/equipment provided to pupils/students with disabilities. Because it is believed that the border between “reasonable accommodation” and “improvement of the basic environment,” which serves as a basis for reasonable accommodation, differ among the targeted schools, the subject of the research includes “reasonable accommodation” provided to targeted pupils/students with disabilities as well as details of “improvement of the basic environment” being utilized by the targeted pupils/students. (See page 323 for the questionnaire’s administrative circular)



*Prepared based on a similar illustration appearing in the report entitled “Promotion of Special Needs Education in Building Inclusive Education System for Formation of a Convivial Society” released by the Central Council for Education’s Subdivision on Elementary and Lower Secondary Education in July 2012.

(4) Results

As a result of the questionnaire, answers were received on the cases of 124 persons. Of these, the cases of 109 persons with mention of efforts with regards to “reasonable accommodation” or “improvement of the basic environment” pertaining to facilities/equipment were used in the analysis.

(Information gathered from the questionnaire and onsite survey can be found on page 57 “List of Examples of Information in Databases (Case Numbers: 1 to 109)”.)

The details of “reasonable accommodation” and “improvement of the basic environment” for the 109 cases involving pupils/students targeted in the analysis with regard to facilities/equipment were made into graphs for each type of disability. The x-axis of the graph indicates, from left, items associated with facility installation, such as slopes, and moving right the x-axis shows items not associated with facility installation, such as furniture, equipment and teaching materials. The y-axis of the graph indicates the number of cases for each item. Additionally, the section containing the results of the analysis provides case numbers of particularly symbolic cases.

Additionally, according to the Central Council Report, “reasonable accommodation” is determined individually based on “improvement of the basic environment.” This indicates that the “reasonable accommodation” provided by each school differs from one another based on the situation of “improvement of the basic environment.” Consequently, the categories of reasonable accommodation and improvement of the basic environment in this research are based on the reports of respondents (school establishers), so even if the same initiatives are undertaken, the category may differ based on the case study. For example, in some situations, slope could fall under the reasonable accommodation category for case A, but the improvement of the basic environment for case B. In such instances, reasonable accommodation can be construed as a condition provided for a single pupil/student (individual), while improvement of the basic environment refers to provision for many and unspecified pupils/students.

[Number of cases subject to analysis] 109 cases of individual pupils/students subject to analysis

(63 pupils/students with a single disability + 46 pupils/students with multiple disabilities)

[Number of cases by disability type] (For the details of each case study, refer to the List of Examples of Information in Databases on page 61)

(1) Visual impairment 4 cases (2 cases of single disability + 2 cases of multiple disabilities)

(2) Hearing impairment 9 cases (7 cases of single disability + 2 cases of multiple disabilities)

(3) Intellectual impairment 46 cases (13 cases of single disability + 33 cases of multiple disabilities)

(4) Orthopedic impairment 17 cases (8 cases of single disability + 9 cases of multiple disabilities)

(5) Frailty/physical weakness 6 cases (3 cases of single disability + 3 cases of multiple disabilities)

(6) Speech impairment 7 cases (1 cases of single disability + 6 cases of multiple disabilities)

(7) Autistic 34 cases (8 cases of single disability + 26 cases of multiple disabilities)

(8) Emotional impairment 13 cases (7 cases of single disability + 6 cases of multiple disabilities)

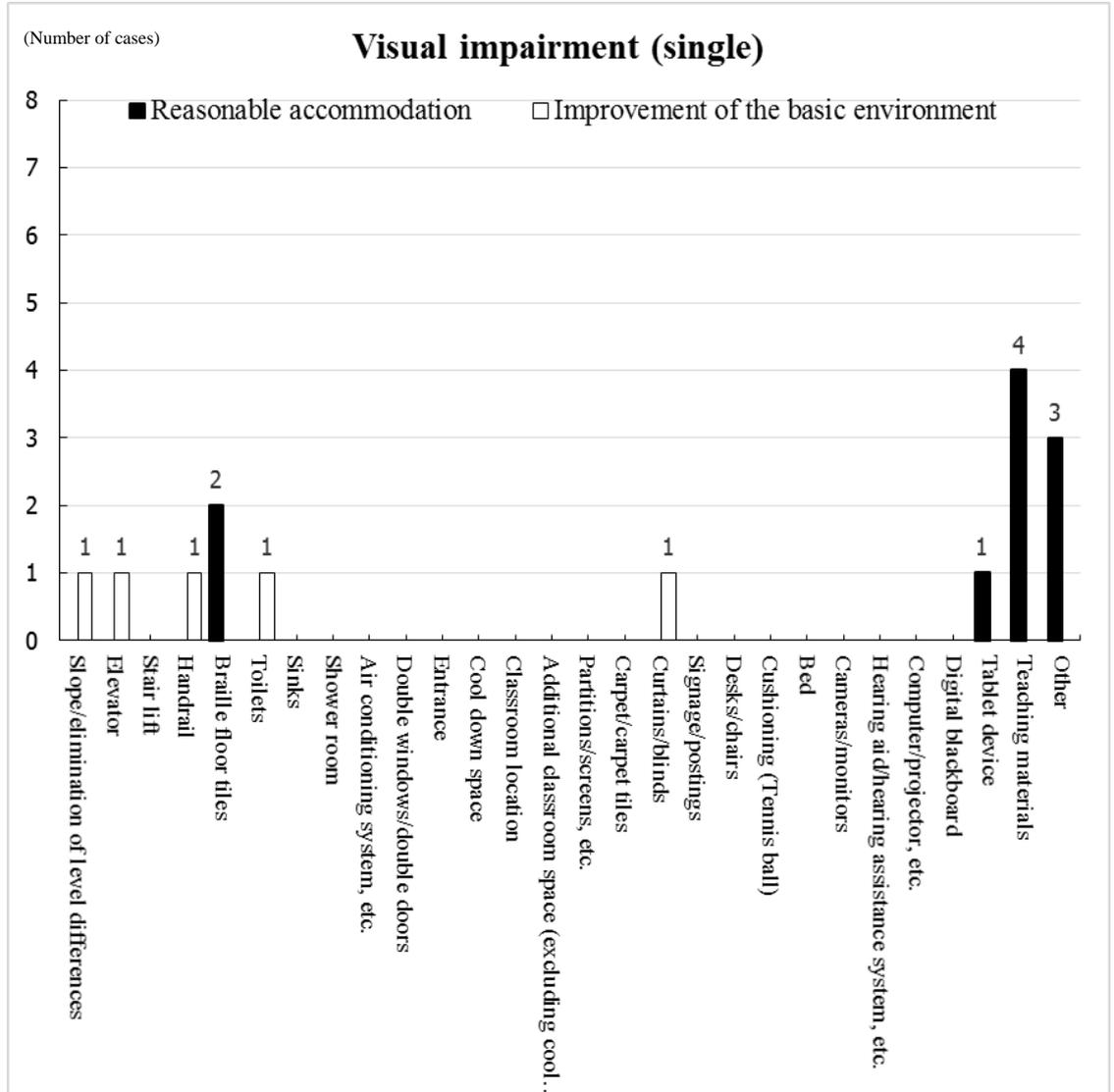
(9) Learning disability 10 cases (4 cases of single disability + 6 cases of multiple disabilities)

(10) Attention-deficit hyperactivity disorder 21 cases (9 cases of single disability + 12 cases of multiple disabilities)

Note) The cases of 109 pupils/students with a disability subject to this analysis includes pupils/students with multiple disabilities, so the simple total of case by type of disability does not add up to 109 cases.

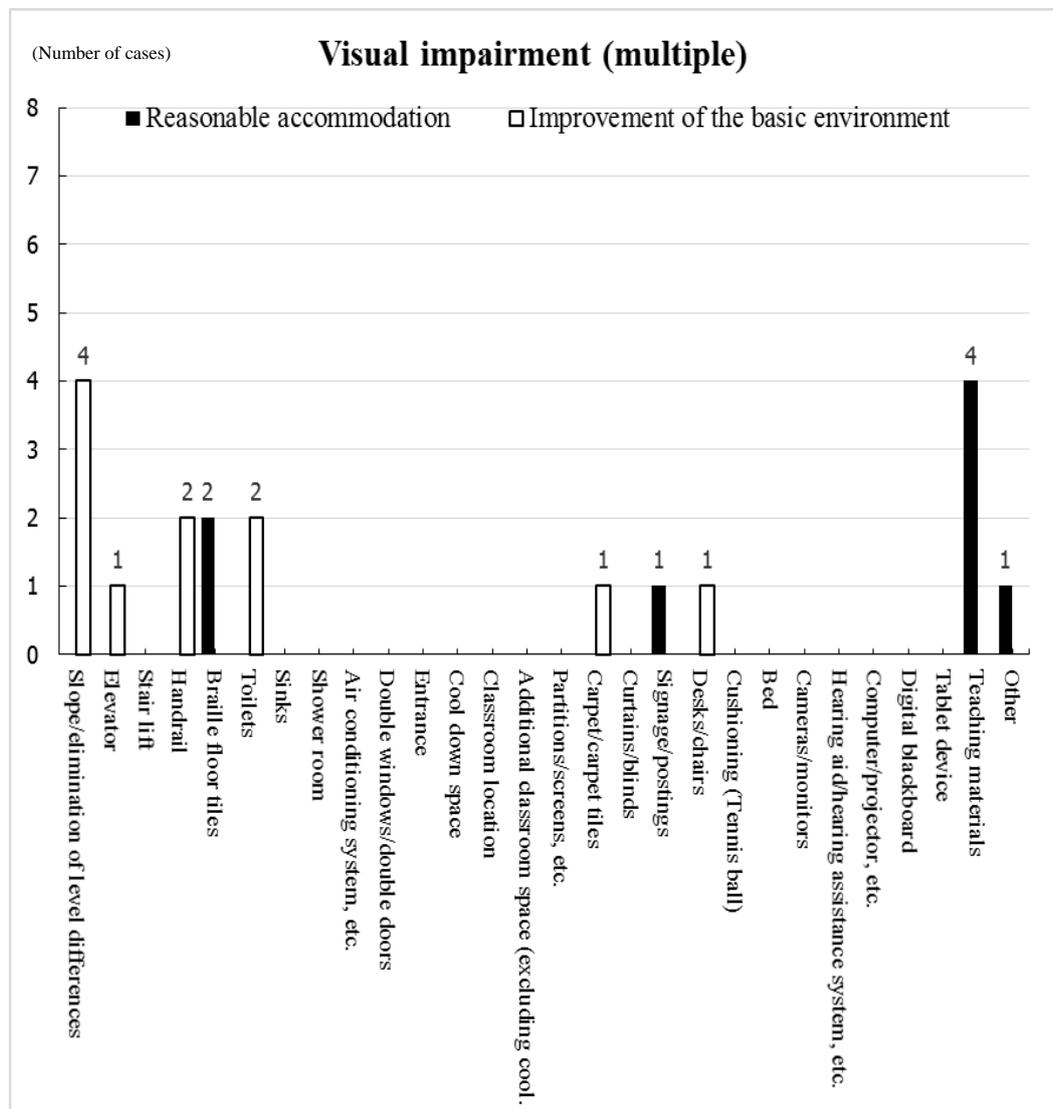
1) Analysis of the 4 cases of visual impairments (2 cases of single disability + 2 cases of multiple disabilities)

① Analysis details of the 2 cases of a single disability



*Reasonable accommodation Other: Panels, creative seat assignments, magnifier
 Teaching materials: Braille books, Braille typewriter, digital Braille notepad,
 Braille locker

② Analysis details of the 2 cases of multiple disabilities



*Reasonable accommodation

Teaching materials: Braille books, talking scales, Braille typewriter, PC software teaching materials

③ Analysis results

a. Cases of reasonable accommodation

- Braille guides and Braille blocks are installed for enabling pupils/students to move around with peace of mind while easily being aware of their surroundings. (Case number: 1)
- Braille books and teaching tools for Braille are provided as teaching materials/teaching tools. (Case number: 1)

Based on the above, reasonable accommodation is being provided mainly for in-school mobility and in terms of learning.

b. Cases of improvement of the basic environment

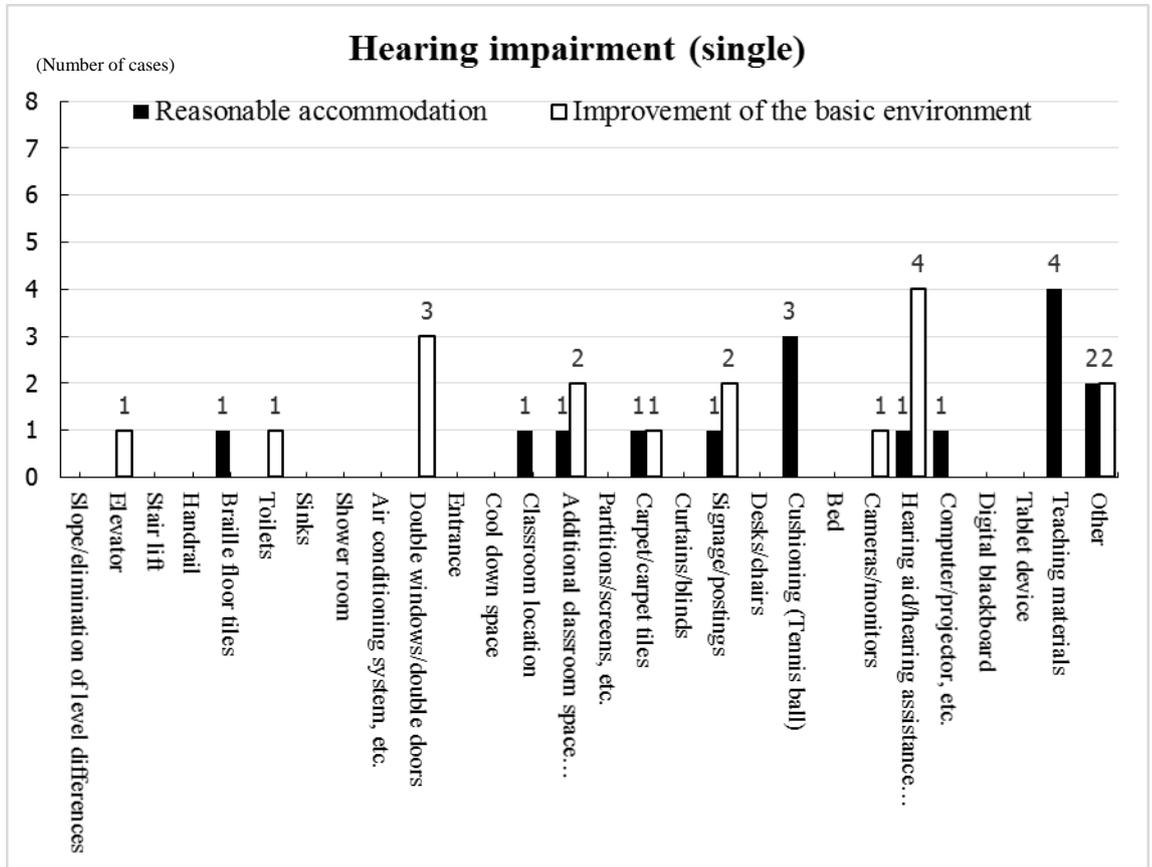
- Basic school facilities have been made accessible/barrier free, such as the availability of slopes, elevators, handrails, and accessible bathrooms.

(Case number: 1)

Based on the above, similar to reasonable accommodation, consideration is being given mainly for in-school mobility and in terms of living.

2) Analysis of the 9 cases of hearing impairments (7 cases of single disability + 2 cases of multiple disabilities)

① Analysis details of the 7 cases of a single disability



*Reasonable accommodation Other: Loud speaker, emergency bell

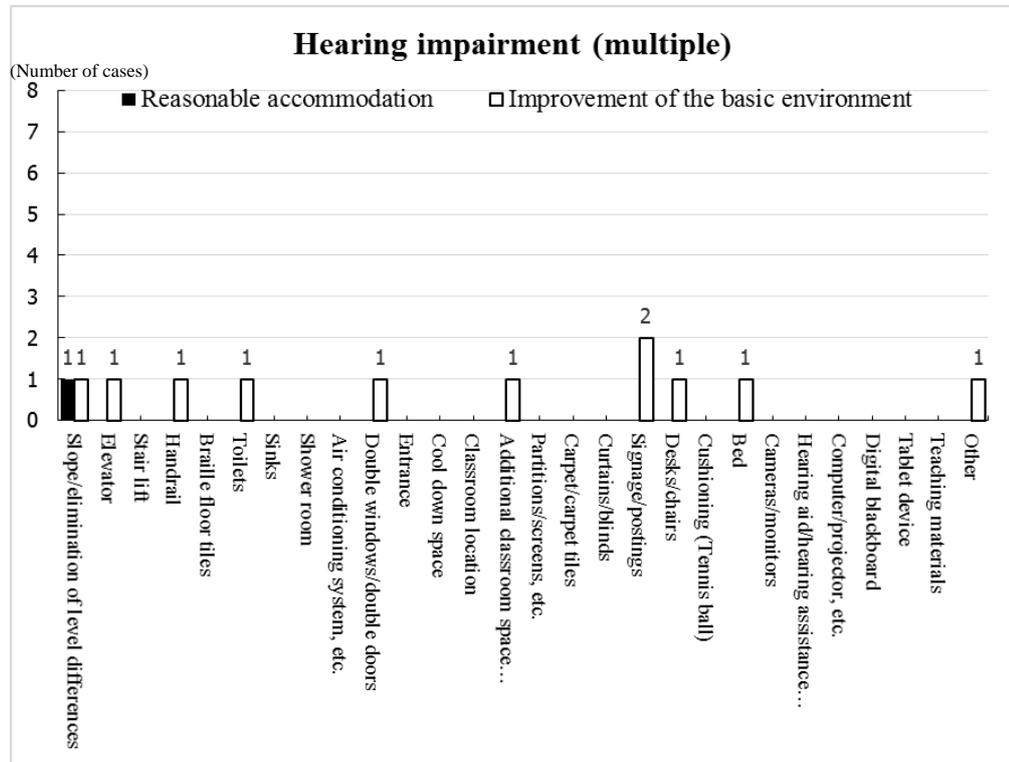
Teaching materials: Visual teaching materials for learning swimming, digital textbooks, bulletin board materials, cards for displaying intentions

*Improvement of the basic environment Other: Equipment with subtitles, information assurance devices

Double windows/double doors: Soundproof walls, double windows, double doors

Hearing aids and hearing aid systems: FM hearing aid transmitter, audio meter, special testing device for hearing aids, group hearing aid system

② Analysis details of the 2 cases of multiple disabilities



*Improvement of the basic environment Signs/postings: Whiteboard, colored lamp (rotating warning light)

③ Analysis results

a. Cases of reasonable accommodation

- Efforts are made to prevent or mitigate loud noise and other noise to every extent possible, and noise prevention or noise muffling measures are in place, such as using cushioning at the bottom of the legs of chairs and desks, to provide a learning environment that is calm and quiet. (Case numbers: 3, 7, 9)
- Consideration is given to visual information assurance through the posting of schedules and utilization of visual teaching materials. (Case numbers: 7, 9)

Based on the above, reasonable accommodation is being provided mainly in terms of learning and living.

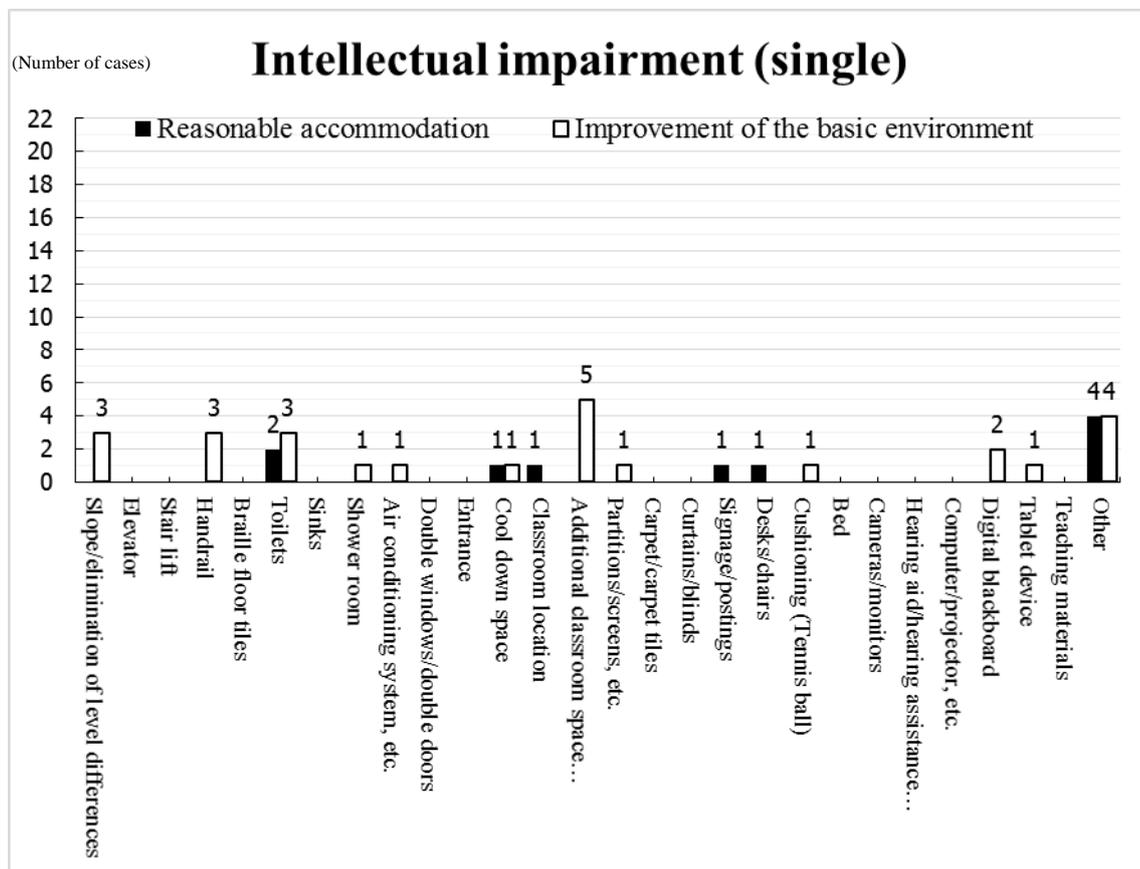
b. Cases of improvement of the basic environment

- Chime with colored lamp (rotating warning light) used to supplement information visually. (Case number: 8)
- There are many cases where classrooms utilize FM hearing aids and teachers use a pendant microphone to teach because incorporating information from the ears to every extent possible helps promote understanding of words and learning of speech. (Case numbers: 7, 8)
- Classrooms use soundproof walls, double windows, soundproof doors and mats to provide an environment that is quiet and calm by implementing measures to eliminate and prevent sounds, such as sound insulation and sound absorbing. (Case number: 6)
- A proper learning environment is in place that has a hearing measurement room equipped with equipment to measure hearing and adjust hearing aids so that the day's hearing ability and performance of hearing aid can be checked.
(Case number: 8)

Based on the above, similar to reasonable accommodation, consideration is being given mainly in terms of learning and living.

3) Analysis of the 46 cases of intellectual impairments (13 cases of single disability + 33 cases of multiple disabilities)

① Analysis details of the 13 cases of a single disability



*Reasonable accommodation Other: Creative seating layout (to front row), full-length mirror (3 cases)

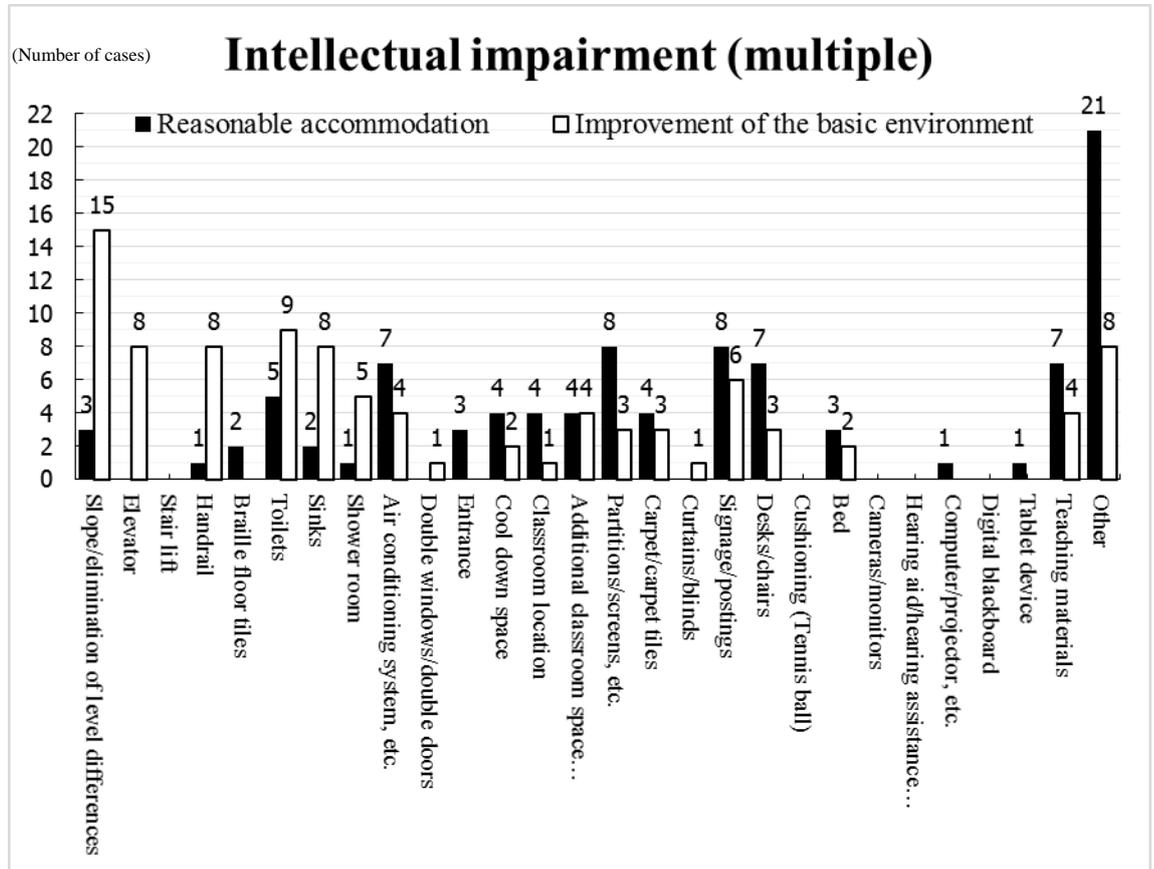
Classroom layout: Class for pupils/students that are frail/have a physical weakness is located right next to the second floor emergency stairs

Cool down space: Learning lab

*Improvement of the basic environment Other: Walkway (from 2F of gymnasium to pool), slide, swing, and climber

Additional classroom space (excluding cool down space): Consultation room (3 cases) and learning lab (2 cases)

② Analysis details of the 33 cases of multiple disabilities



*Reasonable accommodation Other: Timer (2 cases), colored boxes (2 cases), desk position (chair intervals), cushions, disaster preparedness equipment, veranda for evacuation, creative seating layout (to front row), helmets, space to remove shoes, tatami space, microwave, transparent panels, carts, emergency stairs, lockers that lock, picture story shows (for disaster response), organized postings, glass (shatter resistant), class badge

Additional classroom space (excluding cool down space): Playroom (2 cases – stretching and interaction), small room (air conditioned for health management), free space (certain shared space inside the classroom)

Classroom layout: Classes with pupils/students with orthopedic impairment or that are frail/have a physical weakness are located on the first floor to secure an escape route, classroom with good sun exposure selected to maintain indoor temperature (orthopedic impairment), classroom located on the first floor for safety reasons (ADHD), classroom located on the first floor to secure an escape route (autism)

Cool down space: Extra classroom, area inside the classroom enclosed by curtains, area inside the classroom enclosed by screens, special needs education classrooms are temporarily off limits to others

*Improvement of the basic environment Other: Mobile library, heated swimming pool, blackboard that slides up or down, passageway, anti-slip flooring, interior paint, lockers, replacement of sand in the sandbox

③ Analysis results

a. Cases of reasonable accommodation

- Booths are set up around chairs and desks and partition/screens are used inside the classroom to control outdoor stimuli in order to promote concentration on learning. (Case numbers: 20, 79, 80)
- White boards/signs are used to manage individual pupil/student schedules in order to engage in learning according to an outlook. (Case number: 93)
- A portable/mobile white board which pupils/students can view from the same direction as they are sitting is utilized in order to promote concentration on learning. (Case number: 68)
- An extra room or play room is utilized as space for calming emotions or concentrating on learning. (Case numbers: 81, 84, 86)

Based on the above, reasonable accommodation is being provided mainly in terms of learning and living.

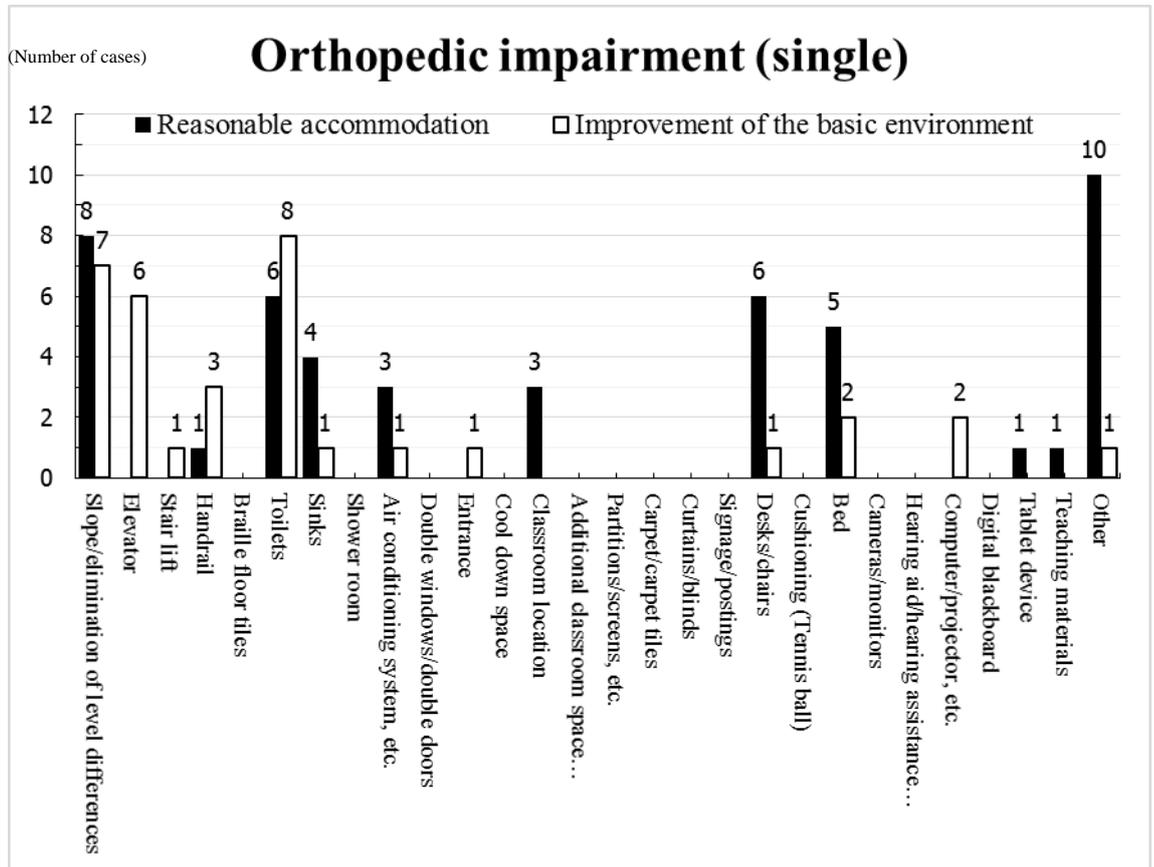
b. Cases of improvement of the basic environment

- Extra classroom space is secured with a consultation room used for counseling, consultations or interviews or a learning lab for one-on-one instruction of pupils/students. (Case numbers: 12, 14, 19, 22)
- Partition/screens are set up to control outdoor stimuli in order to promote concentration on learning. (Case numbers: 20, 89)
- An air conditioning system is installed in consideration of stabilizing emotions and promoting concentration on learning in a quiet environment with the classroom doors and windows closed. (Case number: 10)
- Basic school facilities have been made accessible/barrier free, such as the availability of slopes, elevators, handrails, and accessible bathrooms (including shower rooms). (Case numbers: 15, 16, 81, 83)

Based on the above, consideration is being given mainly in terms of mobility inside the school as well as learning and living.

4) Analysis of the 17 cases of orthopedic impairments (8 cases of single disability + 9 cases of multiple disabilities)

① Analysis details of the 8 cases of a single disability

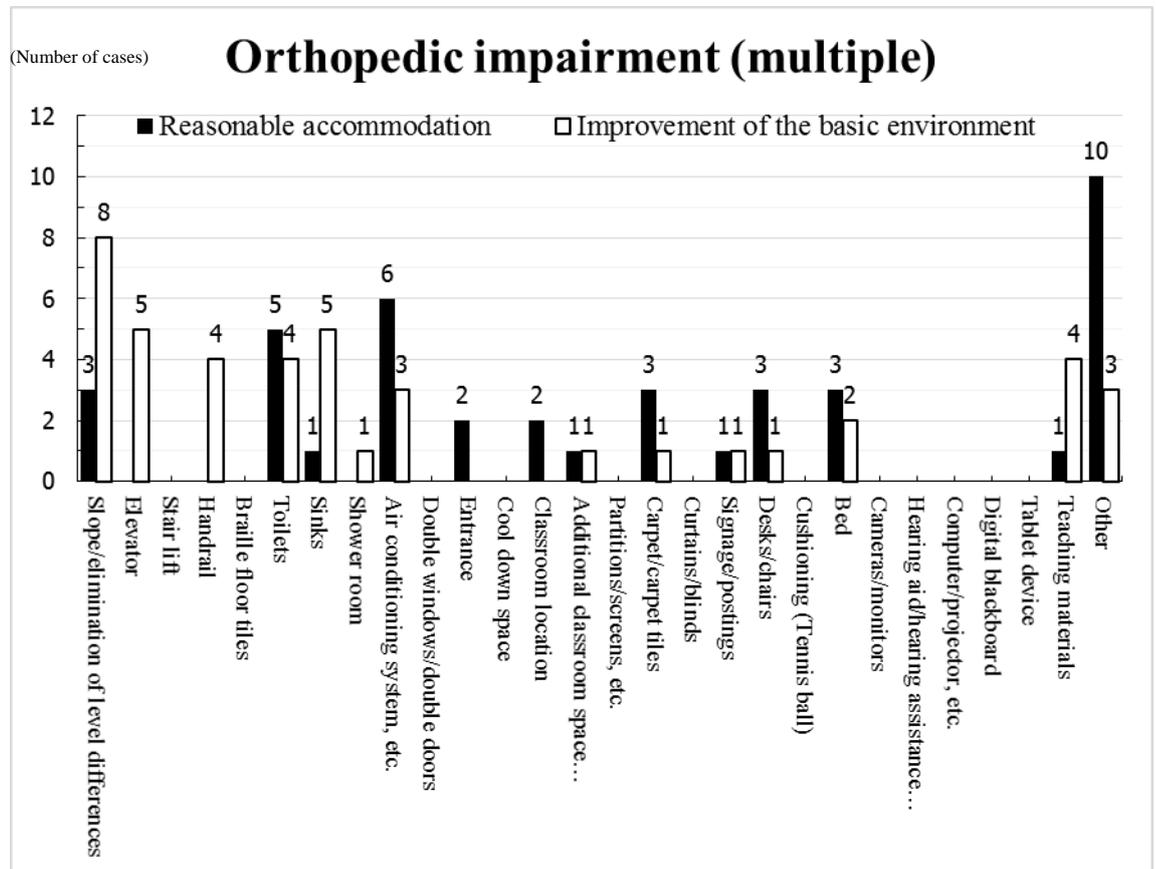


*Reasonable accommodation Other: Full-length mirror, harness (2 cases), sled, blanket, rain gear hangar, supports for standing, stretcher, hard surface flooring (for wheelchair use), and injury prevention cover

Classroom layout: Classroom located on the first floor to secure an escape route (2 cases), the third floor teaching materials room near the elevator was renovated into a special needs education classroom

*Improvement of the basic environment Other: Wheelchair accessible parking

② Analysis details of the 9 cases of multiple disabilities



*Reasonable accommodation Other: Cushions, disaster preparedness equipment, veranda for evacuation, helmets, space to remove shoes, tatami space, microwave, transparent panels, carts, emergency stairs

Classroom layout: Classroom located on the first floor to secure an escape route (2 cases)

*Improvement of the basic environment Other: Mobile library, heated swimming pool, anti-slip flooring materials

③ Analysis results

a. Cases of reasonable accommodation

- Slopes (including portable slopes) are installed in places to eliminate level differences in high traffic areas or at entrances in consideration of various modes of transport used, such as wheelchairs or support apparatuses (walkers or canes). (Case numbers: 24, 26)
- An air conditioning system is installed to ensure good classroom environment conditions ideal for regulating body temperature for pupils/students who have difficulty maintaining their body temperature. (Case numbers: 24, 29)

- Apparatuses and furniture are adopted that are multifunctional and facilitate safety and ease of use, such as multifunction toilets, beds for resting or changing clothes, and furniture such as desks and chairs with adjustable heights. In turn, these are laid out according to the series of movements required. (Case numbers 24, 26, 30)
- Special needs education classes and ordinary classes are located in close proximity on the same floor for the same grade in order to provide an environment that is easy to learn in and promotes mutual aid among pupils/students regardless of disability. In addition, the classroom layout plan was created in a flexible manner with interaction in terms of learning and living in mind. (Case number: 30)
- Necessary facilities/equipment are installed systematically in conjunction with changes in the restroom used or new traffic areas created from changes in classroom layout. (Case number: 30)
- Creativity is used in classroom layout to ensure evacuation routes can be followed in the shortest time possible in order to alleviate difficulty in mobility during a disaster/emergency.
Necessary facilities/equipment are installed, such as handrails, and necessary supplies for after a disaster/emergency occurs are also on hand and available, including wheelchairs and stretchers. (Case numbers: 24, 30)

Based on the above, reasonable accommodation is being provided mainly in terms of mobility inside the school, learning, living, and safety.

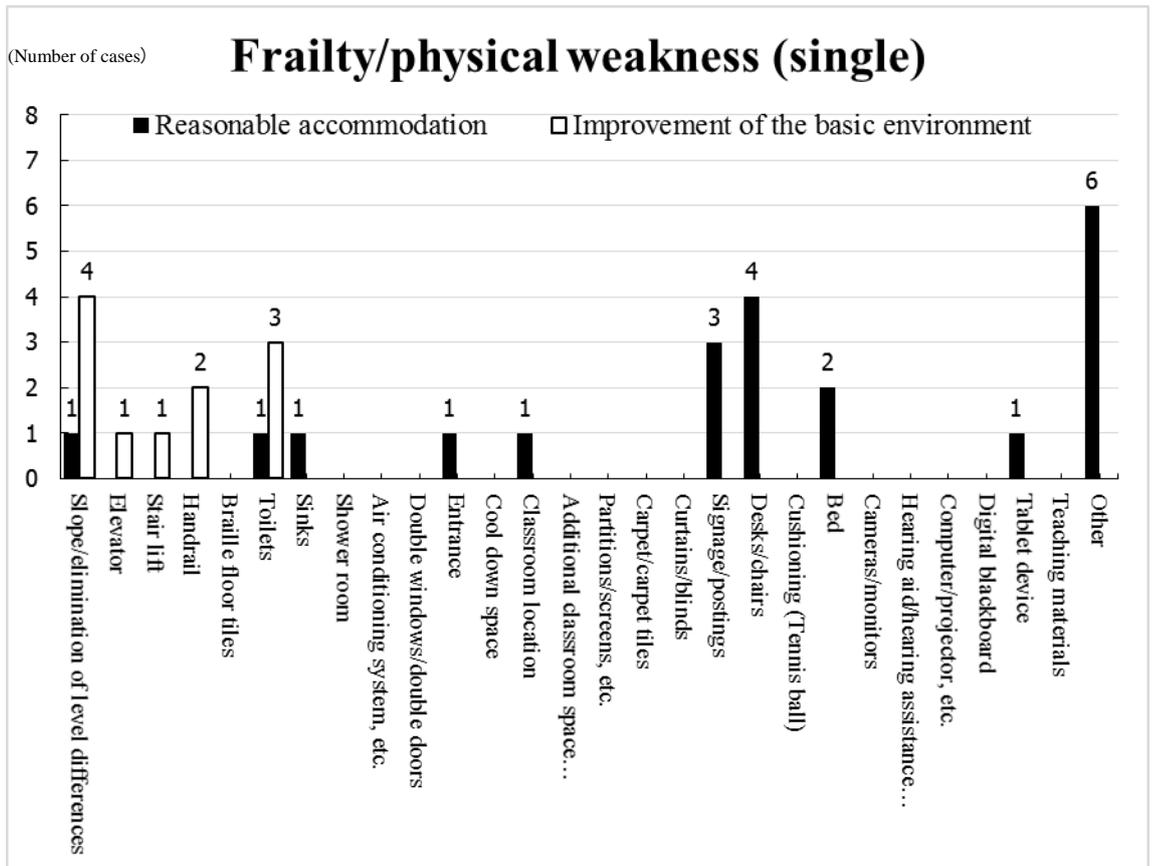
B. Cases of improvement of the basic environment

- Basic school facilities have been made accessible/barrier free, such as the availability of slopes, elevators, handrails, accessible bathrooms, and floors remain the same height throughout. (Case numbers: 23, 24, 25, 26)

Based on the above, consideration is being provided mainly in terms of mobility inside the school and living.

5) Analysis of the 6 cases of frailty/physical weakness (3 cases of single disability + 3 cases of multiple disabilities)

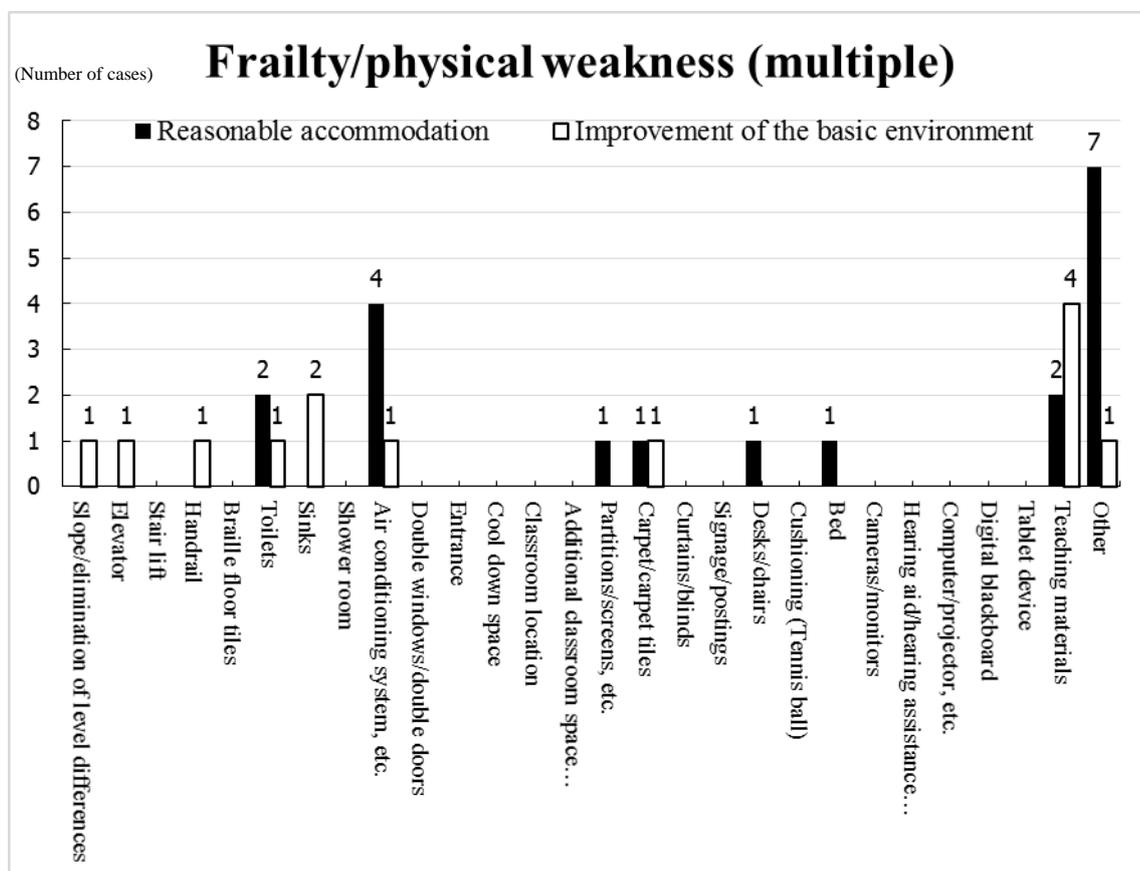
- ① Analysis details of the 3 cases of a single disability



*Reasonable accommodation Other: Secure space for wheelchair movement in the classroom, wheelchair (2 cases), outdoor canvas shoes, harness, stretcher

Classroom layout: Classroom located on the first floor to secure an escape route

② Analysis details of the 3 cases of multiple disabilities



*Reasonable accommodation Other: Cushions, disaster preparedness equipment, veranda for evacuation, microwave, transparent panels, carts, emergency stairs

*Improvement of the basic environment Other: Mobile library

③ Analysis results

a. Cases of reasonable accommodation

- Apparatuses (including evacuation apparatuses) and furniture are adopted that are multifunctional and facilitate safety and ease of use, such as multifunction toilets, beds for resting or changing clothes, and furniture such as desks and chairs with adjustable heights. In turn, these are laid out according to the series of movements required. (Case number: 33)
- A portable/mobile white board, blackboard, or bulletin board which pupils/students can view from the same direction as they are sitting is utilized in order to promote concentration on learning. (Case numbers: 31, 32, 33)

- An air conditioning system is installed to ensure good classroom environment conditions ideal for regulating body temperature for pupils/students who have difficulty maintaining their body temperature. (Case numbers: 72, 73)

Based on the above, reasonable accommodation is being provided mainly in terms of learning, living, and safety.

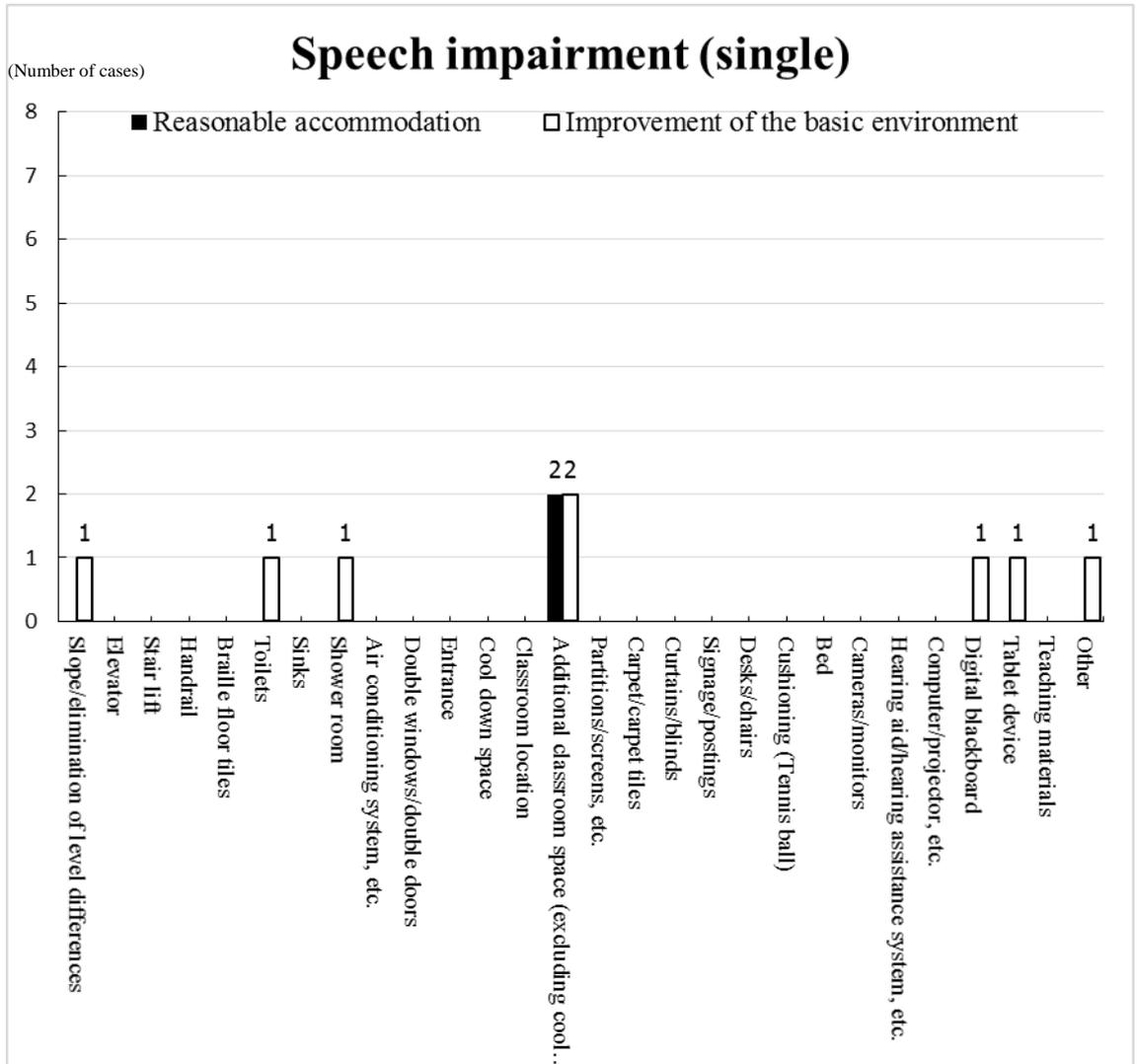
b. Cases of improvement of the basic environment

- Basic school facilities have been made accessible/barrier free, such as the availability of slopes, elevators, handrails, and accessible bathrooms. (Case numbers: 31, 32, 33)

Based on the above, consideration is being provided mainly in terms of mobility inside the school and living.

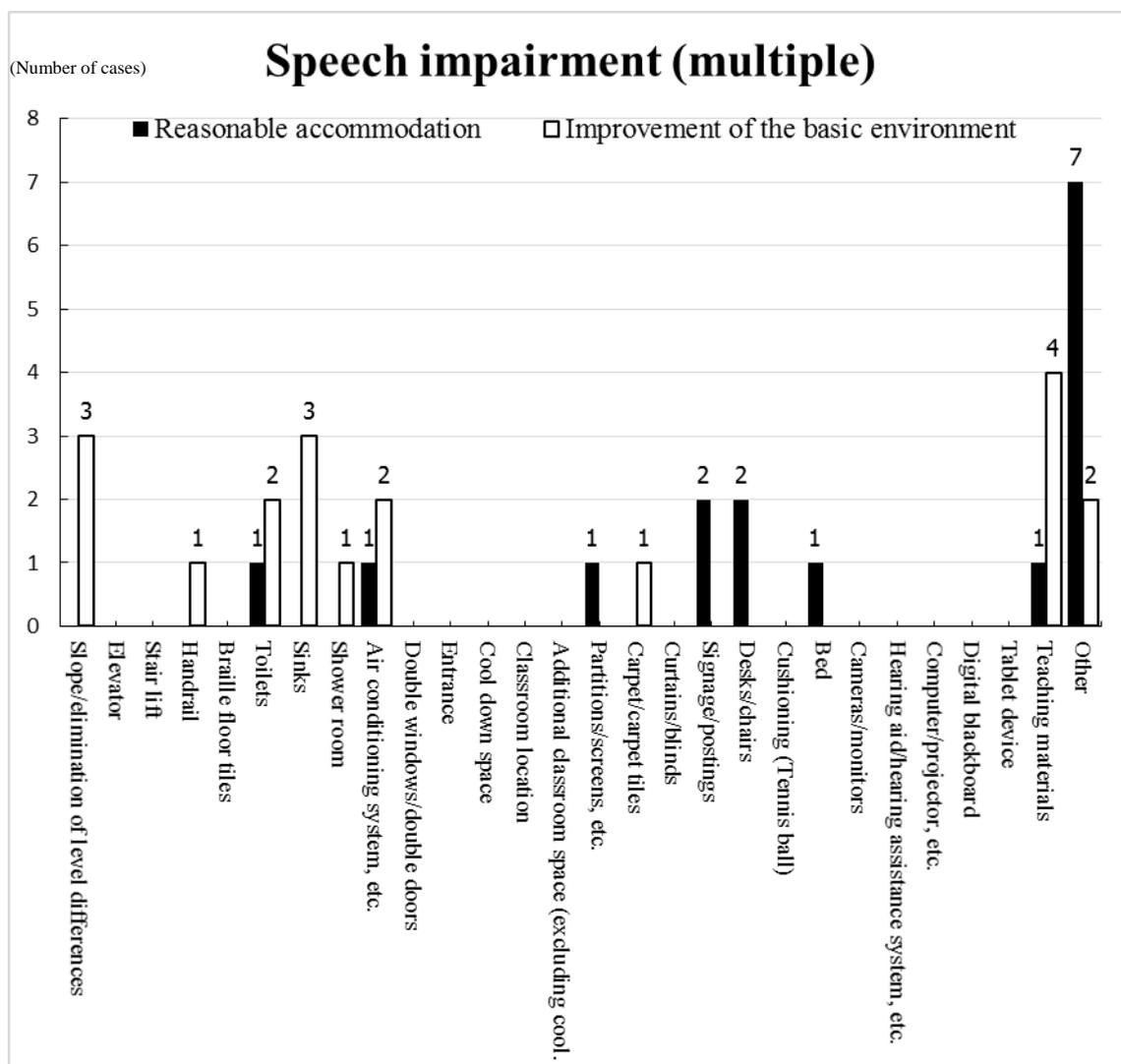
6) Analysis of the 7 cases of speech impairment (1 cases of single disability + 6 cases of multiple disabilities)

① Analysis details of the 1 case of a single disability



*Improvement of the basic environment Other: Tatami space

② Analysis details of the 6 cases of multiple disabilities



*Reasonable accommodation Other: Seating layout (to front row), space to remove shoes, tatami space, microwave, transparent panels, carts, emergency stairs

*Improvement of the basic environment Other: Blackboard that slides up or down, replacement of sand in the sandbox

③ Analysis results

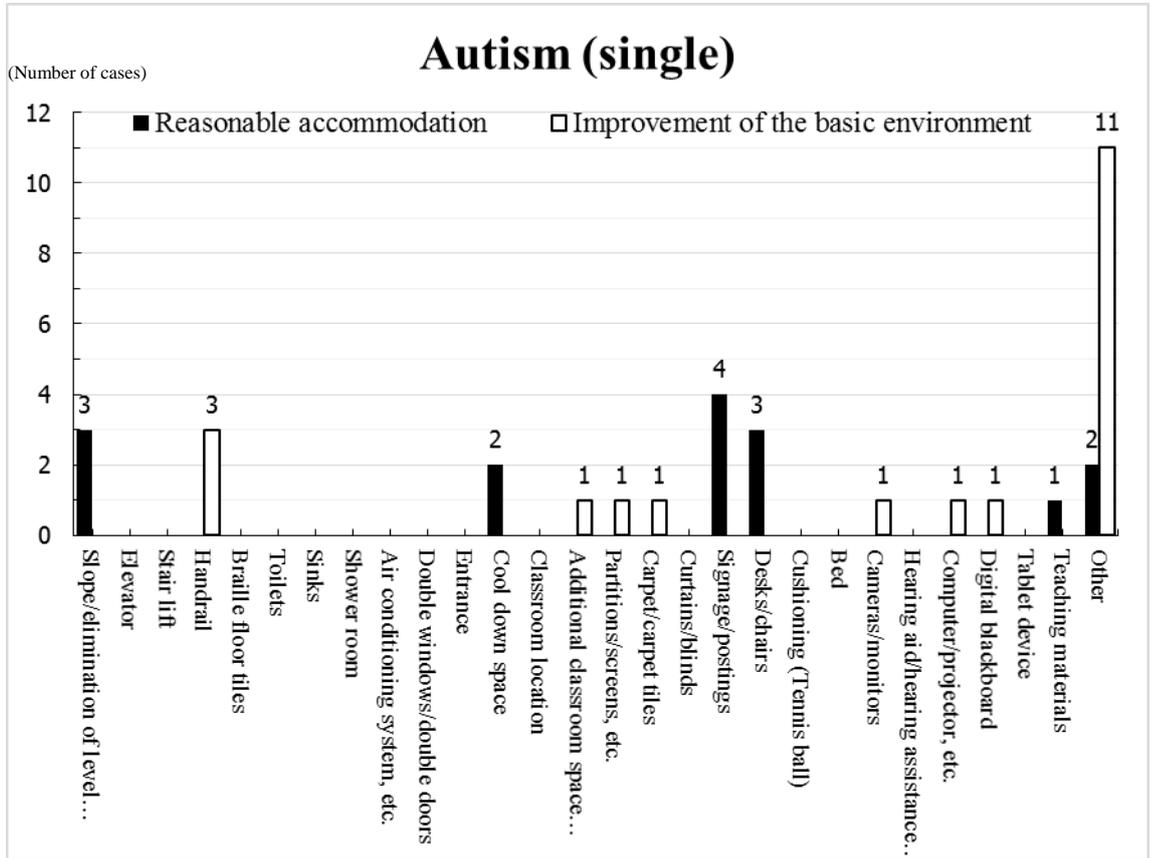
- a. Six of the seven pupils/students with a speech impairment who are subject to this research have multiple disabilities and in most cases their main disability was different from their speech impairment. Therefore, given the amount of data from the research and the details of this data, it was determined that it would be difficult to ascertain trends in reasonable

accommodation and improvement of the basic environment for speech impairment alone.

- b. However, as information confirmed from onsite surveys, in terms of improvement of the basic environment, cases were seen where plans call for speech classes to have mirrors to be used for practicing correct articulation and have wash basins for hand washing and mouth gargling after practice for pupils/students with multiple disabilities who also have a speech impairment, while also providing accommodation for the unique needs of their main disability.

7) Analysis of the 34 cases of autism (8 cases of single disability + 26 cases of multiple disabilities)

① Analysis details of the 8 cases of a single disability



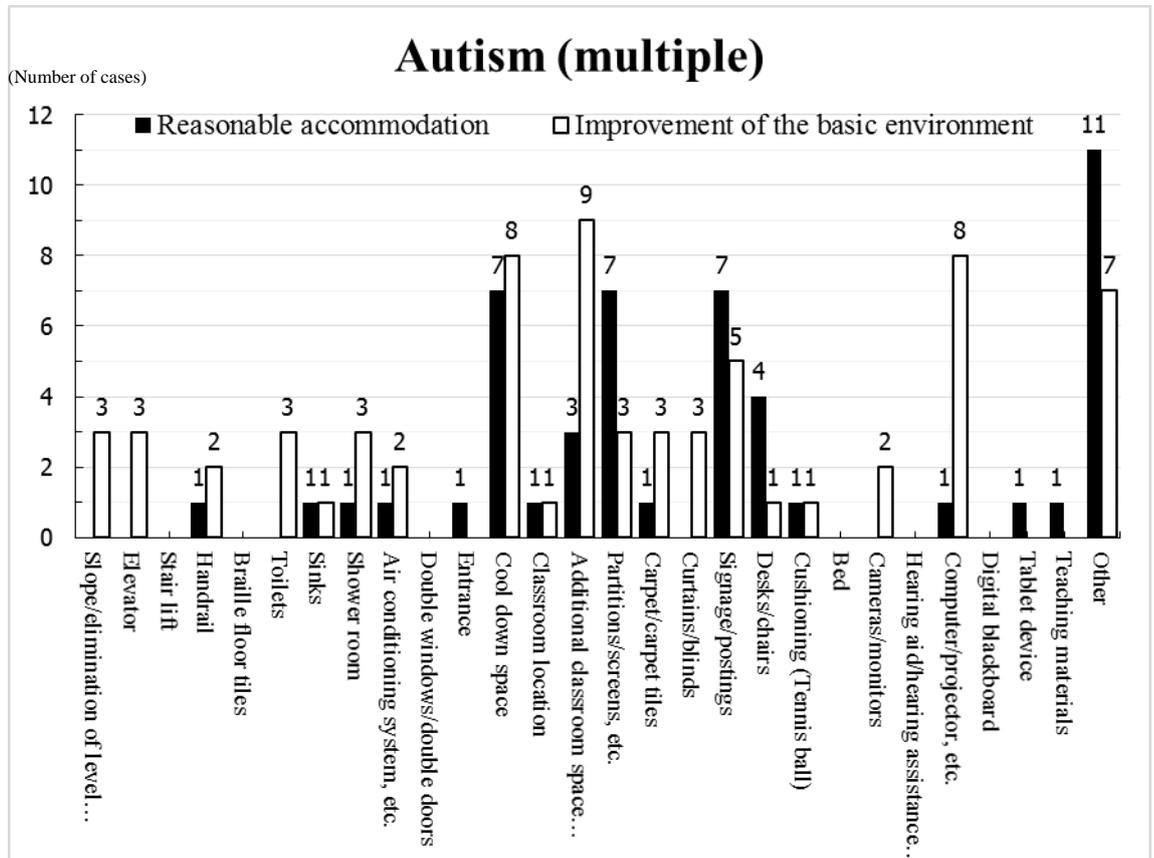
*Reasonable accommodation Other: Seating layout (to front row), cover for play equipment

Cool down space: Space inside the classroom enclosed with screens, dedicated corner inside the classroom

Signage/postings: Displayed on locker, evacuation promise poster, posting of evacuation route, diagrams (indicates day's activities)

*Improvement of the basic environment Other: Class badge, interactive board, safety covers (pillars, doors) (6 cases), doorstops (3 cases)

② Analysis details of the 26 cases of multiple disabilities



*Reasonable accommodation Other: Timer (3 cases), individual boxes inside the classroom, careful selection of postings (2 cases), cloth cover over bookshelf, picture story shows (for disaster response), organized postings, glass (shatter resistant), class badge
Cool down space: Additional classroom, space inside the classroom enclosed with screens (2 cases), room for individual instruction, space inside the classroom enclosed with a curtain, neighboring classroom, special needs education classrooms are temporarily off limits to others

*Improvement of the basic environment Other: Timer (2 cases), seating layout, etc., passageway, interior paint, lockers, frosted glass for the side shelf door of the black board
Cool down space: Special needs education classroom, teaching material room, alcove, consultation room, teacher's office, principal's room, individual exam room, freely dedicated space inside the classroom

③ Analysis results

a. Cases of reasonable accommodation

- Timers and signs are used for visual understanding in order to engage in learning according to an outlook. (Case numbers: 35, 39, 84, 104)
- A small space (location) is set aside next to the classroom or inside the

classroom as a cool down space to accommodate situations when a pupil/student cannot calm down. (Case numbers: 35, 42, 84, 86, 99)

Based on the above, reasonable accommodation is being provided mainly in terms of learning and living.

b. Cases of improvement of the basic environment

- Classroom structuralization* is used to facilitate activities according to an outlook. This includes establishing partitions using furniture or screens and allocating spaces by color to assign a role to each space. (Case numbers: 37, 92)
- Timers, white boards, mobile digital black boards, and pictograms are used for visual understanding in order to engage in learning according to an outlook. (Case numbers: 38, 98)
- A small space (location) away from loud noises or other sounds to every extent possible is set aside next to the classroom or inside the classroom as a cool down space to accommodate situations when a pupil/student cannot calm down. (Case numbers: 93, 96, 98)

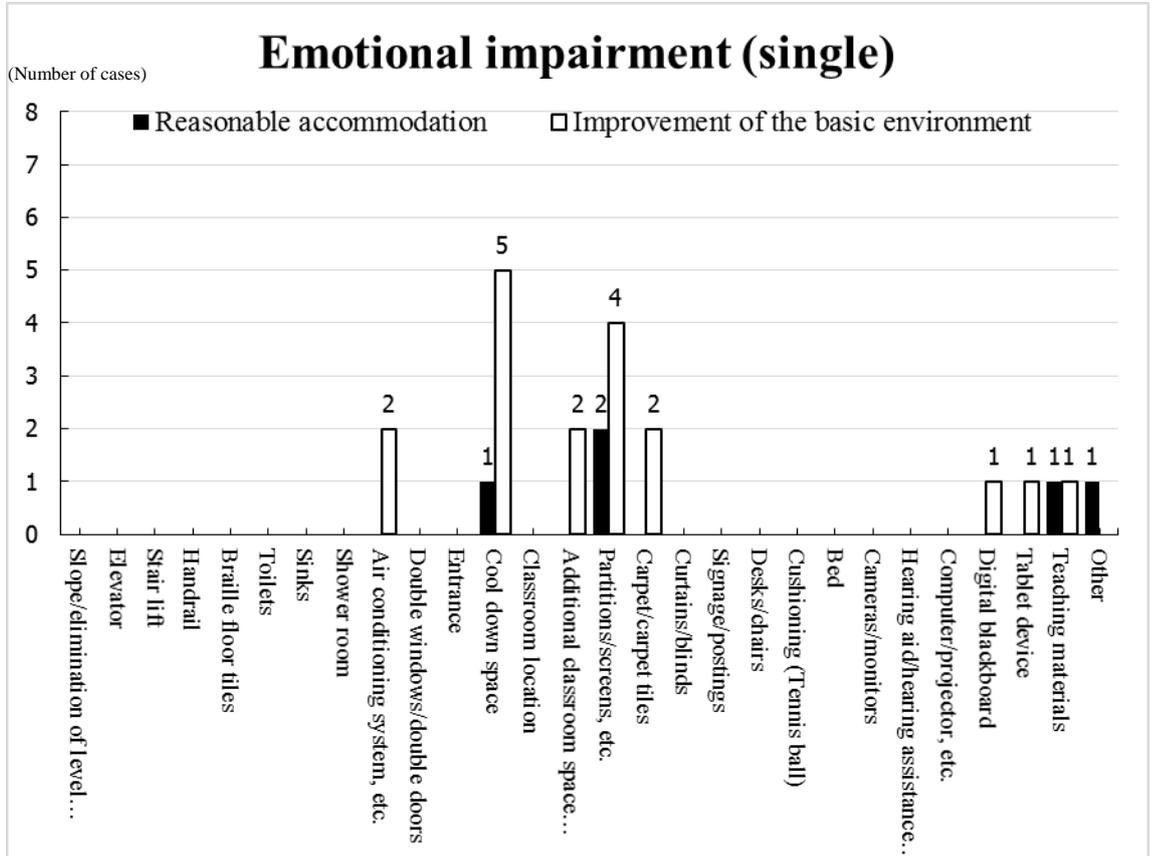
Based on the above, similar to reasonable accommodation, consideration is being provided mainly in terms of learning and living.

*Classroom structuralization (page 48 of the MEXT Guidelines for Designing School Facilities for Special Needs Education [July 2014])

The term “classroom structuralization” is defined as “establishing partitions using furniture or other means and allocating spaces by color to assign a role to each space in order to facilitate activities of infants/pupils/students with multiple disabilities including autism according to an outlook.”

8) Analysis of the 13 cases of emotional impairment (7 cases of single disability + 6 cases of multiple disabilities)

① Analysis details of the 7 cases of a single disability



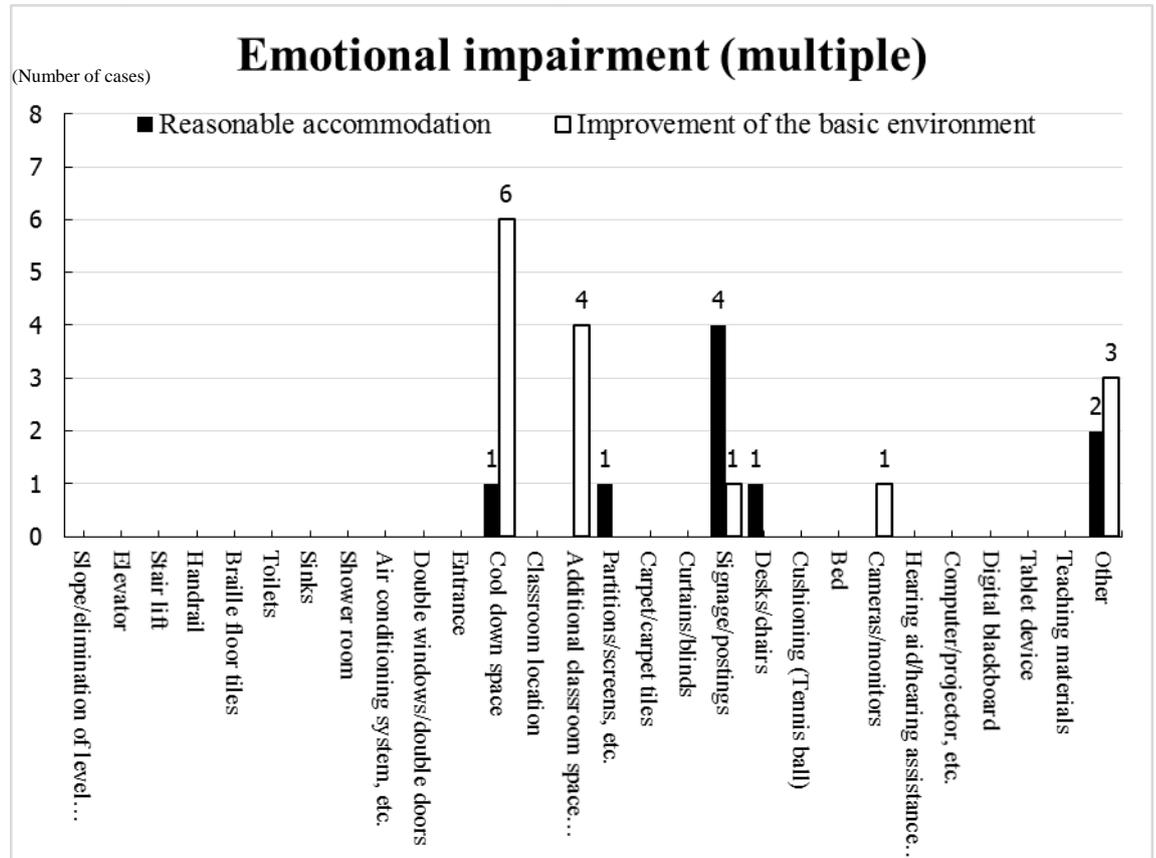
*Reasonable accommodation Other: Bookshelf of drill learning teaching materials

Cool down space: Small room that can be made into a dark place

*Improvement of the basic environment Cool down space: Consultation room (2 cases), special needs

education classroom, teaching materials room, alcove

③ Analysis details of the 6 cases of multiple disabilities



*Reasonable accommodation Other: Colored boxes, desk layout (intervals between desks)

*Improvement of the basic environment Other: Timer (2 cases), seating layout, etc.

Cool down space: Instruction room, parents waiting room, teacher's office (2 cases), consultation room, principal's room

④ Analysis results

a. Cases of reasonable accommodation

- Whiteboards and signs are used for visual understanding in order to engage in learning according to an outlook. (Case number: 93)
- A booth or accordion doors are set up to create individual learning and activity spaces in order to engage in learning and activities in a space that is calm and quiet. (Case numbers: 43, 49)

Based on the above, reasonable accommodation is being provided mainly in terms of learning and living.

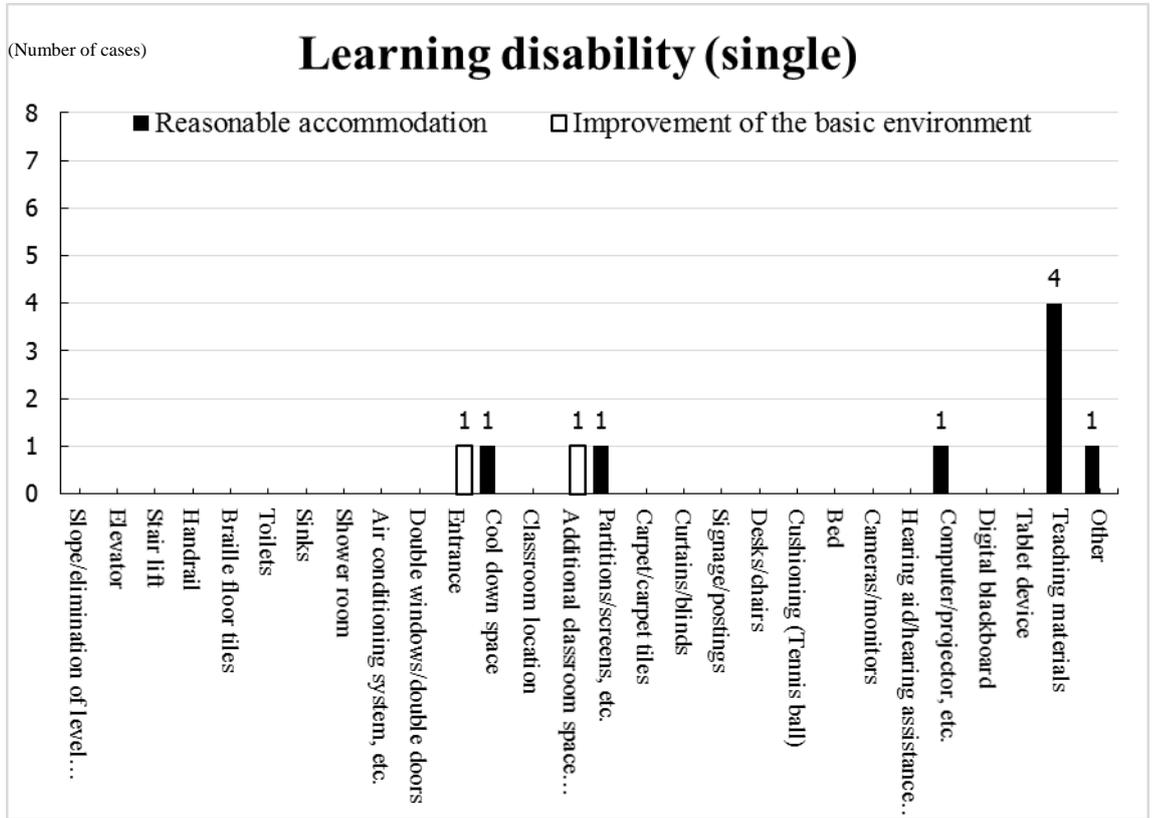
b. Cases of improvement of the basic environment

- Carpet or carpet tiles are used for flooring inside the classroom to prevent noise and other sounds to every extent possible. (Case number: 43)
- Whiteboards, digital blackboards and signs are used for visual understanding in order to engage in learning according to an outlook. (Case number: 44)
- An air conditioning system is installed so that the windows can be completely closed to help control body temperature and to reduce stimuli such as loud noises (Case number: 43)
- A small space (location) away from loud noises or other sounds to every extent possible is set aside next to the classroom or inside the classroom as a cool down space to accommodate situations when a pupil/student cannot calm down. (Case numbers: 43, 46, 93)

Based on the above, similar to reasonable accommodation, consideration is being provided mainly in terms of learning and living.

9) Analysis of the 10 cases of learning disability (4 cases of single disability + 6 cases of multiple disabilities)

① Analysis details of the 4 cases of a single disability

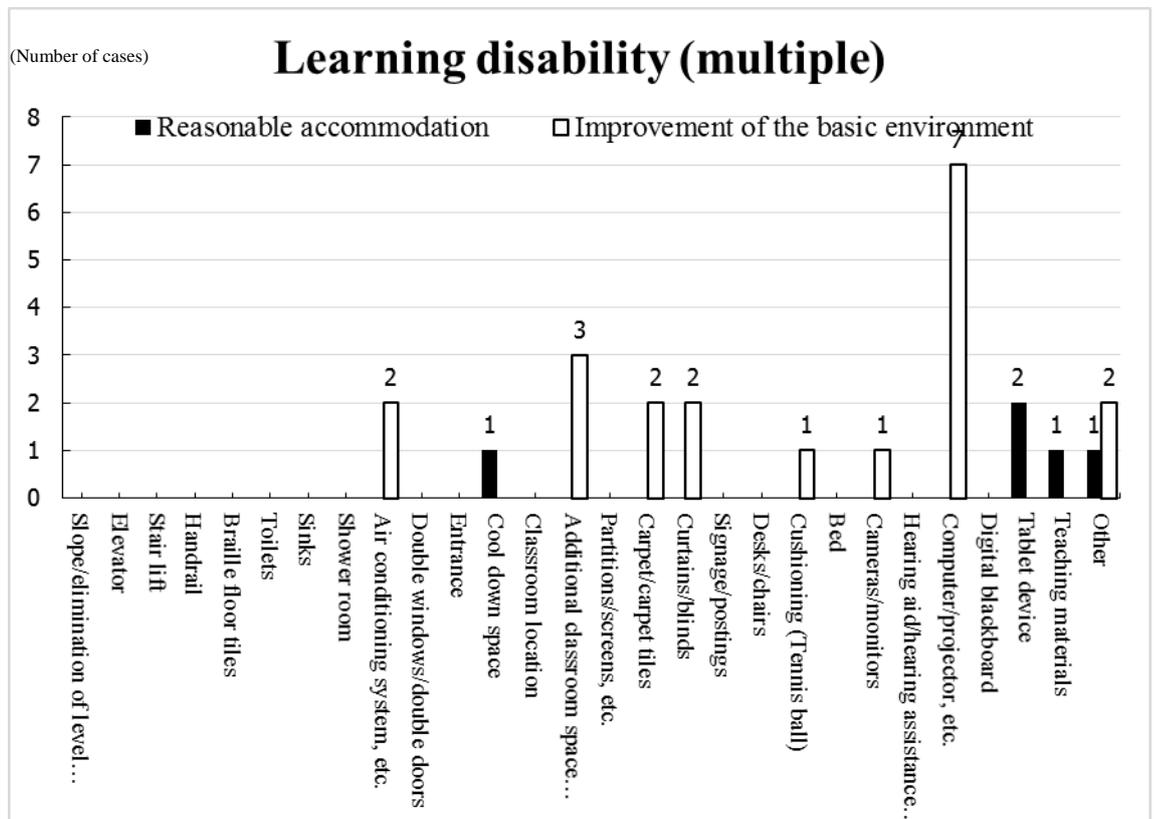


*Reasonable accommodation Other: Cover over bookshelf

Teaching materials: Digital textbooks, vision training teaching materials, bead sets, speech cards

Cool down space: A dedicated space inside the classroom for cooling down

② Analysis details of the 6 cases of multiple disabilities



*Reasonable accommodation Other: Careful selection of postings, etc.

Teaching materials: Kanji practice sheets

Cool down space: Adjacent classroom

*Improvement of the basic environment Other: Two-way mirror, timer

③ Analysis results

a. Cases of reasonable accommodation

- Digital textbooks that are visually easy to understand and document cameras are utilized for instruction with an emphasis on visual information input. (Case number: 52)
- Screens are used to partition spaces as part of classroom structuralization* in order to engage in learning with greater concentration.(Case number: 53)

Based on the above, reasonable accommodation is being provided mainly in terms of learning.

b. Cases of improvement in the basic environment

- ICT equipment is utilized to promote understanding while assisting with areas in need of improvement, such as viewing, reading, or writing, in order to foster more effective learning. (Case numbers: 102, 108)

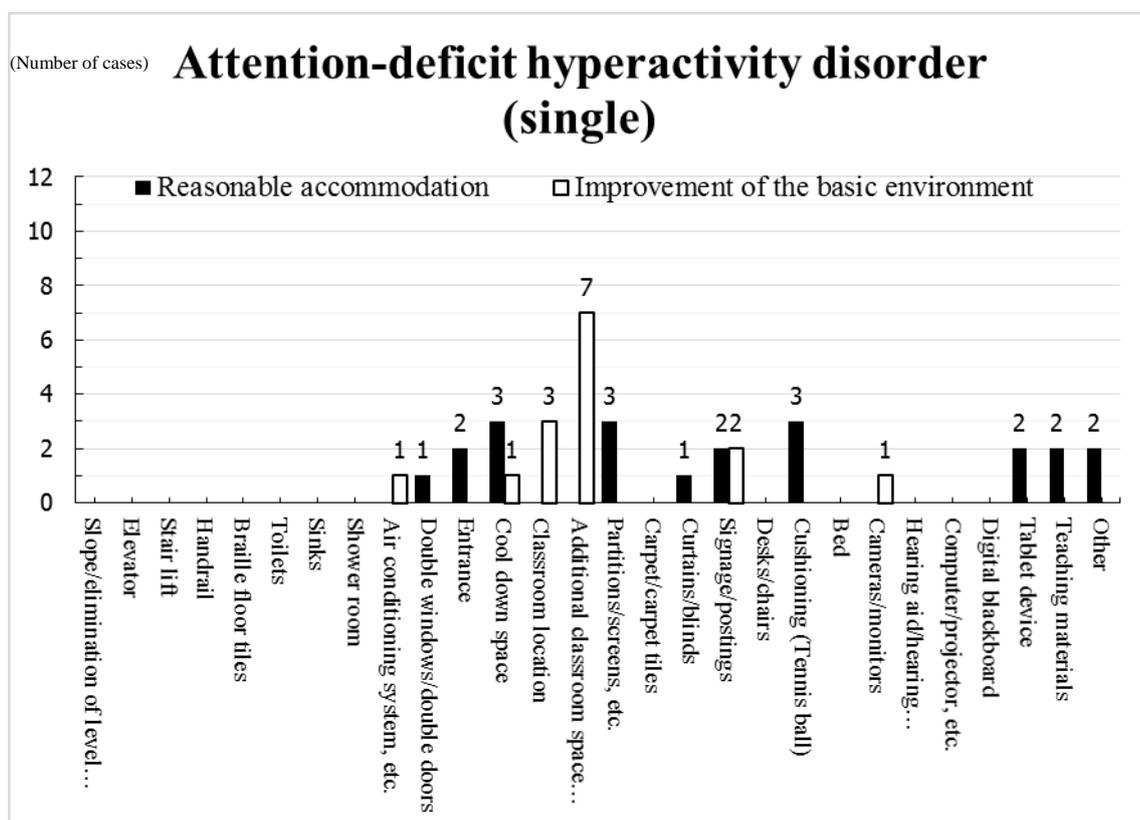
Based on the above, similar to reasonable accommodation, consideration is being provided mainly in terms of learning.

*Classroom structuralization (page 48 of the MEXT Guidelines for Designing School Facilities for Special Needs Education [July 2014])

The term “classroom structuralization” is defined as “establishing partitions using furniture or other means and allocating spaces by color to assign a role to each space in order to facilitate activities of infants/pupils/students with multiple disabilities including autism according to an outlook.”

10) Analysis of the 21 cases of attention-deficit hyperactivity disorder (9 cases of single disability + 12 cases of multiple disabilities)

① Analysis details of the 9 cases of a single disability



*Reasonable accommodation Other: Careful selection/uniformity of postings, tatami mat space

Cool down space: Additional classroom, mat space inside the classroom, space inside the classroom enclosed by screens

Sound prevention measures: Attaching cushioning at the bottom of the legs of chairs and desks (3 cases), double doors

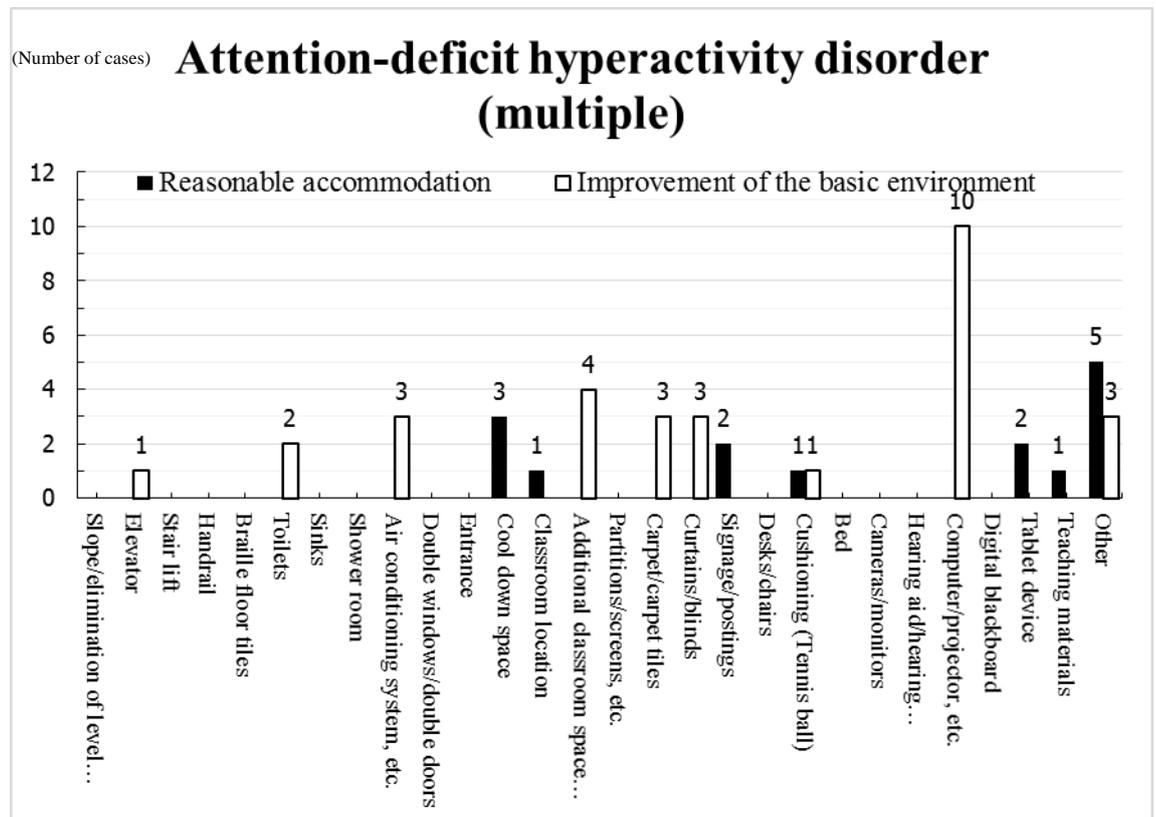
*Improvement of the basic environment

Additional classroom space (excluding cool down space): Consultation room, small group instruction room, individual instruction room, playroom, resource room (2 cases) training space

Classroom layout: Quiet classroom isolated from the main building (3 cases)

Cool down space: Special needs education classroom

② Analysis details of the 12 cases of multiple disabilities



*Reasonable accommodation Other: Locked lockers, careful selection of postings (2 cases), timer, cover over bookshelf
 Classroom layout: Classroom located on the first floor to secure an escape route
 Cool down space: Additional classroom, mat space inside the classroom, space inside the classroom enclosed by screens

*Improvement of the basic environment Other: Two-way mirror, timer, frosted glass for the side shelf door of the black board
 Additional classroom space (excluding cool down space): Education consultation room, viewing room with two-way mirror (2 cases), resource room

③ Analysis results

a. Cases of reasonable accommodation

- Cushioning is attached to the legs of chairs and desks to avoid loud noise and other sounds to every extent possible. (Case number: 58)
- ICT equipment is utilized to promote understanding while assisting with areas in need of improvement, based on interests. (Case number: 54)
- A small space (location) away from loud noises or other sounds to every extent possible is set aside next to the classroom or inside the classroom as a cool down space to accommodate situations when a

pupil/student cannot calm down. (Case numbers: 59, 62)

- Special needs education classes and ordinary classes are located in close proximity on the same floor for the same grade in order to provide an environment that is easy to learn in and promotes mutual aid among pupils/students regardless of disability. In addition, the classroom layout plan was created in a flexible manner with interaction in terms of learning and living in mind. (Case number: 54)

Based on the above, reasonable accommodation is being provided mainly in terms of learning and living.

b. Cases of improvement of the basic environment

- When pupils/students learn in both ordinary classroom and resource room, a resource room is set up in proximity to the teacher's office or school consultation room away from normal classes for pupils/students who do not want it known that they are taking classes in resource rooms or for pupils/students who want to cool down in a quiet setting. (Case number: 62)
- Additional classroom space (excluding the cool down space) includes instruction rooms, play rooms, and parents waiting rooms needed mainly for the establishment of consultation rooms and resource rooms as part of efforts to support the learning and living activities of pupils/students with a disability. (Case numbers: 57, 58, 59, 61)
- ICT equipment is utilized in order to instruct pupils/students that require visual information. (Case number: 104)

Based on the above, similar to reasonable accommodation, consideration is being provided mainly in terms of learning and living.

2-2 Facilities Plan for Combined Public Elementary Schools and Special Needs Education Schools (Contributions by Experts)

According to Article 24 of the Convention on the Rights of Persons with Disabilities, an Inclusive Education System is a system whereby persons with disabilities and persons without disabilities learn together. This section represents contributions by experts in the field involved in construction planning with regard to two plans that have already incorporated the concept of an inclusive education system combining a special needs education school with an ordinary school.

(1) Tokamachi Municipal Tokamachi Elementary School / Fureai no Oka Special Needs Education School / Tokachi City Developmental Assistance Center

“Creating a Dream School”

Jun Ueno
President
Tokyo Metropolitan University

1) Background to the Planning Process and Construction

Construction on the school of dreams aimed at the realization of inclusive education was completed in December 2012 following approval of the “school construction concept grounded in the philosophy of co-existence” by the local community and school officials. This particular school (below, “the school”) combines the three functions of elementary school, special needs education school and developmental assistance center.

The background to the planning process and construction of the school begins with the “School Planning Committee” established in 1997 and organized by local community members, graduates, parents, and school teachers. Over the years, this organization continued with its movement to renovate the school while working closely with the city’s board of education, which in turn resulted in the construction of an elementary school that is combined with a special needs education school, marking the goal from

the outset. This represents the success of an unwavering movement started more than a decade ago and steady actions being taken. I, myself, was involved with this planning and construction process for a long period of time.

2) Summary of Facilities Aimed at Realizing Inclusive Education

It goes without saying that a school is a symbolic hub that forms the heart of any regional community. It is very meaningful that the school was created in the truest sense by the collective consensus of opinion of the local people. The major initial objective of the School Planning Committee was to achieve a school where pupils/students can coexist under the same roof regardless of disability. The importance of achieving this objective and its excellent progressiveness will likely have a major impact on society.

Additionally, it is highly commendable that the facilities are more than adequate for fulfilling its function of realizing an inclusive education. As follows, I will now explain about the summary of facilities aimed at achieving inclusive education involving these three facilities.

① Summary of Facilities

Name: Tokamachi Municipal Tokamachi Elementary School/
Fureai no Oka Special Needs Education School /
Tokachimachi City Developmental Assistance Center
Address: 614-32 Tatsuotsu, Tōkamachi-shi,
Niigata-ken 948-0000, Japan
Total cost: 1,980 million yen
Completed: December 2012
Lot size: 19,716 m²
Total floor space: 7,994 m²
Structure: Reinforced concrete
Dimensions: 2 levels above ground



② Number of pupils/students and classes (as of May 1, 2014)

- Tokamachi Elementary School: 298 ordinary students/12 classes and 7 special needs pupils/students/2 classes
- Fureai no Oka Special Needs Education School: Number of pupils in the

elementary school: 13/4+1 (serious overlapping impairments) class

Junior high school students: 16/4 classes

③ Review Structure for the Construction Plan

With the School Reconstruction Promotion Committee, consisting of the general public, experts, PTA members, and school teachers, as the head organization, requests from the School Planning Committee and New School Construction Finance Committee could be heard, while the School Reconstruction Review Committee jointly staffed by the regulatory authority, members of the School Planning Committee, and school officials, carried out the basic design with me participating officially as a design advisor.

④ Creative Solutions used to Combine the Schools in terms of design (zoning, traffic plans).

- a. Create a school friendly to pupils/students with disabilities filled with warmth and space that enables co-existence and interaction through the integration of an elementary school, special needs education school, and developmental assistance center.
 - Ensured accessible and easy to use lanes for pupils/students of both schools
 - Accessible/barrier free building (elimination of level difference, elevators, multifunction toilets, two-level handrails, etc.)
 - Created an interaction space in the middle of the building where pupils/students could gather freely as well as interact and play naturally.
 - Constructed a pool with slope on the roof and ensured accessible and easy to use lanes for pupils/students with disabilities (use of elevator)
- b. Create a school with facilities that will serve as the core of special needs education for the entire community.
 - Established facilities for consultations, family support, functional training, and training sessions, etc.
 - Ensured facilities made it possible for the special needs education school, developmental assistance center and resource room can work together.
- c. Make the school a facility that functions like a center supporting

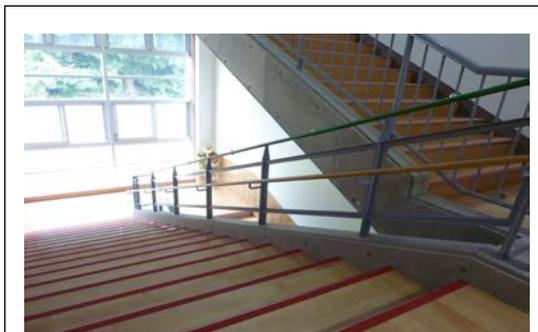
development, including child day care services and rehabilitation from infant until participation in society.

- Facilities that enable the special needs education school and resource room to work together in terms of instruction and assistance

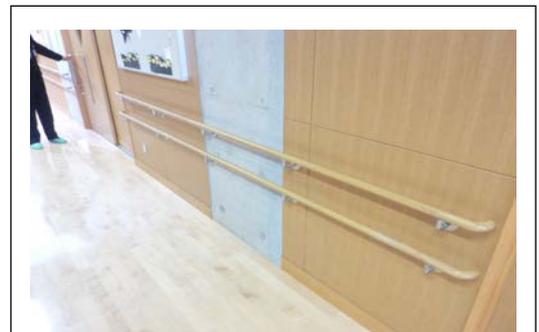
- Facilities that guide and assist parents and teachers involved in rehabilitation and special needs education

d. The location of the three facilities was determined by the School Reconstruction Review Committee, which I participated in, considering the convenience of users, the safety of pupils/students' commute, the distance with common areas, and site improvements to take place after framing. As a result, the floor plan shown on the next page was approved. During the design phase, interviews with staff from all three facilities were held and ideas from pupils/students were also subject to the discussions in an effort to create a user-friendly design. As a result,

- The height of the light switches in each classroom was lowered.
- Two-level handrails were used and the height of individual stairs was reduced and each step elongated.



Two-level handrails as well as low and elongated steps



Two-level handrail in a hallway

- The same entrance is used for both schools, with lanes taking pupils/students to classrooms through the entrance hall beyond and past the courtyard (multipurpose space). The courtyard was created to pupils/students of both schools to see one another, talk and interact



Common entrance for both schools



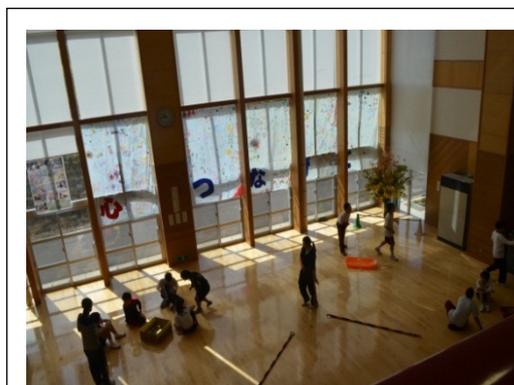
Looking at the entrance hall from indoor courtyard
(Fureai Hiroba; multifunctional space)

together on a daily basis.

- The boys changing room was placed within the Fureai no Oka Special Needs Education School zone and the girls changing room within the Tokamachi Elementary School zone, ensuring that the daily movements of staff intersect with one another and that staff from both schools are able to monitor pupils/students of all three facilities.

3) Creating a Dream School

It goes without saying that this century is the century when normalization in its truest sense must be achieved. According to Article 24 of the Convention on the Rights of Persons with Disabilities, which Japan ratified in January 2014, an Inclusive Education System is a system whereby persons with disabilities and



Space for interaction of pupils from both schools in the inner courtyard (Fureai Hiroba; multifunctional space)



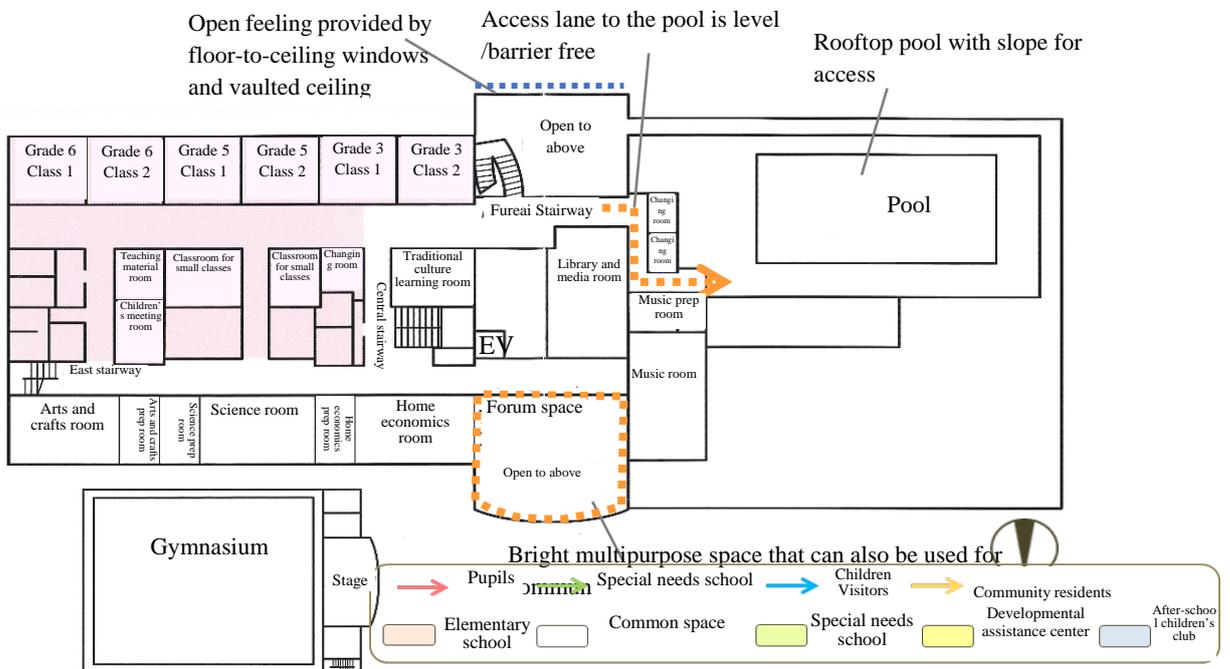
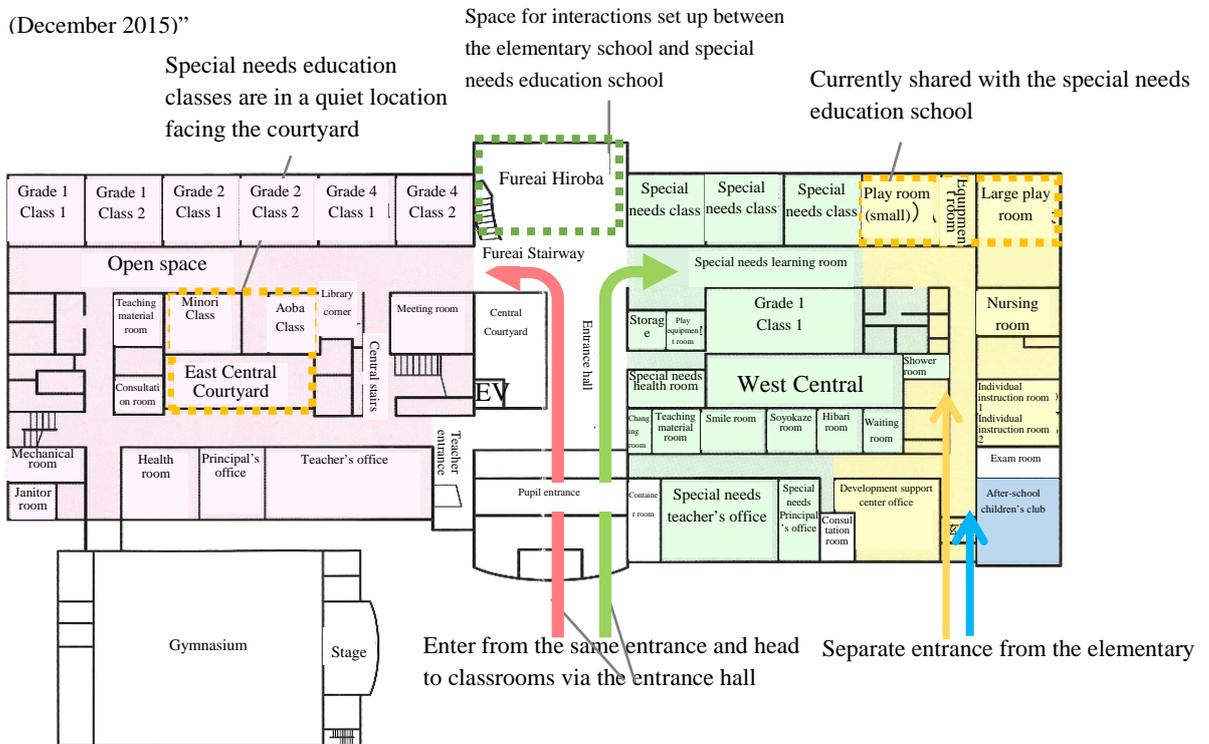
Pupils from both schools interacting at Fureai Hiroba Source: School brochure

persons without disabilities learn together. It requires the provision of “reasonable accommodation” required of individuals and presenting pupils/students with disabilities with opportunities for primary and secondary education in the communities where they live. Efforts are now underway to hasten the realization of inclusive education. Given this trend, the birth of excellent school construction is a precious asset for the local community, and I am very proud to have been involved with the creation of this “dream school” for such a long period of time. I have high expectations for the practice of advanced education and the enhancement of the quality of inclusive education utilizing this excellent environment to be disseminated nationwide across Japan.

Floor Plan Features

Source: MEXT report “Approaches to School Facility Integration Contributing to Enhanced Learning Environments

(December 2015)”



(2) Itoigawa Municipal Itoigawa Elementary School / Hisui no Sato Integrated School

Creating an Inclusive School through Local Efforts for Developing All Children Together

Satoru Nagasawa
Professor Emeritus
Toyo University

1) Introduction

The completion ceremony for the new school was attended by all of the children from Itoigawa Elementary School and the special needs education school called Hisui no Sato Integrated School. After singing their school song, the pupils of the elementary school moved on to the school song of Hisui no Sato Integrated School, and when doing so the entire student body began loudly singing in unison. After hearing their school song sung loudly by such a loud audience, the children of Hisui no Sato Integrated School became really excited since the song is always sung in small groups. The children began to form a procession while singing and mixing in gestures, and then the teachers rushed over to get the children to sit in their seats. This scene was quite moving for the visitors and guardians in attendance. Days later, guardians of children attending Hisui no Sato Integrated School commented this was the first time they realized the school song was such a wonderful song and teachers of the elementary school said they were moved by the scene. Even if loud voices were occasionally let out from the Hisui no Sato Integrated School section, the pupils of the elementary school weren't distracted and kept focusing on the ceremony. It goes without saying that the upbringing of these children represents the fruits of daily interaction between the schools.

Summary of Facilities

Name: Itoigawa Municipal Itoigawa Elementary School /

Hisui no Sato Integrated School

Address: 1-2-1 Chuo, Itoigawa City, Niigata Prefecture

Total cost: 2,580 million yen

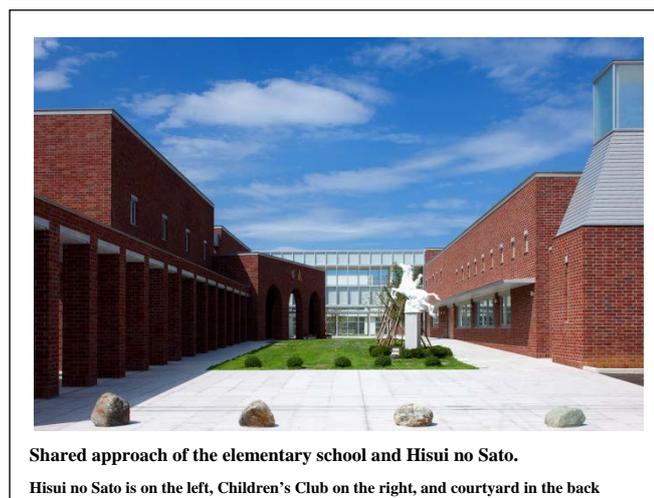
Completed: May 2014

Total floor space: 9,167 m²

Structure: 2F reinforced concrete building

Planning consultant: Satoru Nagasawa (Institute of Educational Environment / Toyo University)

Design and project management: So-Gondola-Kondo Design Specified Joint Venture



Number of pupils/students, classes, and teachers (as of May 1, 2014)

• Itoigawa Elementary School: 452 ordinary students/17 classes 24 special needs pupils/3 classes 46 teachers

• Hisui no Sato Integrated School: Elementary school: 9 students/6 classes Junior high school: 10 students/4 classes 19 teachers

2) Creating an Inclusive School

Itoigawa Elementary School dates back more than 140 years when it first opened in 1872 along with the promulgation of Japan's education system. Because it was located in an area of the prefecture without a special needs school, the "Organization Desiring to Establish a Special Needs School" was established in 2002 and later in 2003 this organization submitted a request for special needs school establishment to the prefectural government after obtaining the understanding of the elementary school's PTA and officials. Following this, in 2005 Niigata Prefectural Takada Special Needs School Hisui no Sato Branch School was established using a surplus classroom in Itoigawa Elementary School. As a base school, a speech class was set up for children commuting from outside the school district.

Four years later in 2009 the city decided to reconstruct the school due to aging, and the "Itoigawa Elementary School Reconstruction Review Committee" was established. A designer was selected using a proposal format and I was chosen to participate as an advisor.

One of the issues from the proposal was "how to design the school utilizing civic participation." During the planning phase, a total of 48 people participated including teachers, PTA members, city employees, nearby residents, and the design team, with four workshops being held. The theme for each workshop was: (1) Common Ground for School Creation – Seeing the Light!; (2) Sharing an Image of the School – Sharing Ideas; (3) Image Sharing – Making Everyone's Ideas a Reality; and (4) School Layout – Making Everyone's Ideas a Reality. A relevant presentation was made and related documents were presented at each session, which was followed by an exchange of opinions in a workshop format.

At the first workshop, various issues facing the modern planning of school facilities were brought up and participants were asked to select the one that interested them the most. Each of the issues was important and they included highly functional educational spaces, enriching living spaces, collaboration with the local community, environmental

consideration, safety and peace of mind, and a disaster-resilient school. However, the issue cited by the majority of participants was creating a school that accommodates everyone and is comfortable for all. Some participants shared their view of building an “inclusive school,” hitting the nail on the head. I felt that the efforts of the two schools to date were highly evaluated.

However, as the review progressed, the prefectural government said it did not have any plans to build a special needs school, causing a temporary deadlock as plans for the special needs education school were up in the air. Accepting this, the mayor made the wise decision of making the elementary school and junior high school departments into a municipal special needs education school, and the city assembly did not have any objections, so the plan was restarted. The basis for this response was the city’s “integrated education policy for children from age 0 to 18” that calls for providing education that fosters a sense of love in Itoigawa as a hometown, utilizing the unique personalities of each individual, and making it possible for all pupils/students to fully develop their skills. The educational philosophy of the Itoigawa City Board of Education calls for all city residents to share common awareness of their role in each developmental stage of children and to work mutually together toward that end. As a result, the plan was resumed facilitated by the understanding of city residents. This demonstrates an inclusive view toward education in which the school would be a place not just reserved for children attending the special needs education school, but for the growth of all children in the community.



School planning workshop in progress



“This is your new school.” Designer explaining the new school campus to students



Workshop where children from the elementary school and Hisui no Sato wrote their names or messages on bricks used for the exterior walls

3) Inclusive School Facilities Plan

Within the facility plan and design, one of the greatest challenges facing the review is the layout and space for encouraging and fostering easier interaction in order to create an inclusive school where a variety of children develop together. As a basis for this, it is important that the individual schools utilize the warmth of wood, provide an enriching living environment, including toilets, and offer a comfortable school space. This requires a sense of unity where each other's movements can be seen and the equal sharing of communal facilities, while also providing an enriching education environment required of both schools. The review process included, for example, ways to design the school so that the pupils/students can wear indoor slippers throughout.

① Layout where people's faces are visible

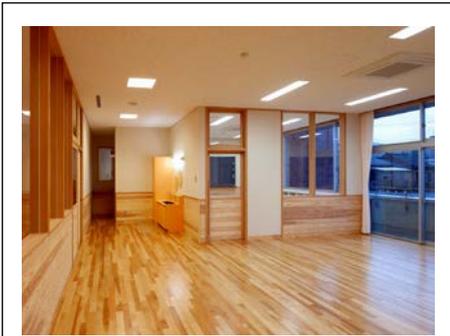
The layout of Hisui no Sato Integrated School was designed so that people's faces are visible to one another. The school's front yard features a hedge a hedge through which the community residents watch over children. The speech classroom is used for the elementary school's special needs education classes and resource room classes to promote cooperative learning and to make it easier for guardians to interact with one another. Also, the after-school children's club room, which is a focal point of childcare, is also located nearby.



Classrooms interiors surrounded with the warmth of wood using local lumber



Speech classroom for resource room and play room



Special needs education classroom and play room



Den in one corner of a classroom for lower grade levels

② Approach and entrance as a place for interaction

The school's entrance was designed with a red brick exterior wall and a series of three arches similar to the old Itoigawa Station locomotive train garage that was a symbol of the community. The approach brings people toward the entrance. Hisui no Sato Integrated School has an entryway directly connected to the parking lot, but children in good health enter and exit the school following a passageway with an elongated roof (exterior passageway with a big colonnade) located along the approach space together with pupils of the elementary school. In the center of the approach space sits the renovated statue of Hakuba Doji, which was a symbol of the school, expressing that this is a place where children develop together.

The atrium past the shoe storage at the entrance is called Hisui Hall. To the right is a large staircase going to the second floor of the elementary school, while the hall itself serves as a gathering place. Continuing to the left is Hisui no Sato's small gymnasium. Past the light garden to the front is a glimpse of the special needs education classes and resource room classes. This hall serves as a place for

pupils/students of both schools to naturally mingle and mutually encounter one another.



The approach illuminated at night



Series of three arches at the front entrance evoking memories of the former Itoigawa Station locomotive train garage built from red bricks



Statue of Hakuba Doji, symbol for children's growth, relocated to the center of the approach



Hisui Hall in front of the entrance serves as a space for interaction between pupils of the elementary school and students of Hisui no Sato

③ Courtyard that serves as a symbol of the school

The courtyard in the old school was utilized as a place for playing, learning and interacting. It also served as a symbolic space featuring a commemorative tree and commemorative statue. This courtyard served as an excellent venue for interactions between the pupils of the elementary school and the children of Hisui no Sato. Requests to incorporate a courtyard into the design of the new school came up quite often during the workshops. The new courtyard has roughly the same dimensions as the old one and features grass. Instead of being surrounded by a three story building like before, the new school is two stories, so the sky appears to be more expansive and the courtyard itself is brighter. You can also see children riding in buggies spending time in the courtyard.



④ Education space that fosters a sense of unity

The plan for Hisui no Sato Integrated School worked to address the detailed requests for safety, comfort and the unique needs of children with disabilities during the total 88 regularly held construction meetings. Classes of the elementary school department are situated on the first floor and the junior high school department on the second floor, connected to the atrium hall which is used for learning, gathering and eating. The wooden interior and comfortable space provided by in-floor heating is used for various exhibitions and presenting the children's works.

⑤ Comfortable and easy to use library, multipurpose hall and special classrooms

In the middle of the school is a rounded multipurpose hall sticking out into the courtyard and the library which overlooks this hall. The bright multipurpose hall is utilized for learning, gathering, playing, exercise and interactive activities. The library is a generous size and was designed to house various styles of reading and spaces where pupils/students can decide on places to spend time. During the day, children of Hisui no Sato Integrated School enjoy reading books and being read to. Each special classroom is laid out in close proximity, making movements between facilities easy and accessible.



Multipurpose hall with atrium open to above serves as a space for interaction with Hisui no Sato



Library has various reading areas and is open to the children of Hisui no Sato

4) School life at the new school and initiatives for inclusive education

Pupils of Itoigawa Elementary School and children of Hisui no Sato Integrated School follow the approach as they enter and exit the same entryway and exchange greetings in Hisui Hall. During the day, pupils/children naturally interact with each other at the library, multipurpose hall, courtyard and biotope. Classes carry out interactions and cooperative learning systematically. Evacuation drills teach pupils/children to have careful consideration for small children and children who cannot move quickly. Ms. Keiko Hokari, Principal of Hisui no Sato Integrated School says that the large amount of time and many spaces spent together at the same school campus will help ordinary class children to discover “while there are differences with themselves, there are also many similarities, too,” which will help promote awareness and actions such as talking to one another or helping one another.

Systematic interactions are mainly carried out by the elementary school department and persons in charge of interaction for both schools regularly liaison and coordinate with one another to make announcements about school events and children’s events, as well as to check approaches to participation and accommodation. Meetings are also held irregularly about the philosophy behind approaches taken by the two schools, as all teachers interact with one another not just for the purposes of interacting, but for the purpose of developing the children through these interactions. Being the same municipal school, parents of both schools, too, are expected to forge cooperative relationships more so than before.

Starting in April 2014, an after-school day service for children with disabilities was initiated by a social welfare corporation, which coordinated with the school to avoid

any impacts on the school's educational activities. This service was also offered during summer break as well.



Learning in an open space at Hisui no Sato Integrated School



Hisui no Sato's small gymnasium is connected to the front entrance hall and can be used by pupils of the elementary school, too



Exterior view of the classrooms and garden biotope; the building in the far back houses the classrooms of Hisui no Sato

5) Closing

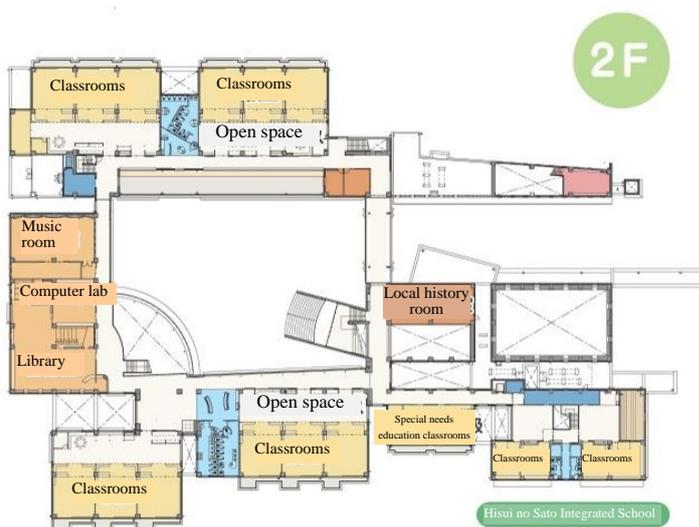
After completion of Itoigawa Elementary School and Hisui no Sato Integrated School, a number of events took place at the completion ceremony of the new school, including a presentation on the construction process and philosophy behind the plan, introduction of the new school to the children, environmental improvement work led by parents, children, and teachers, and introduction of the school to parents and the local community.

Additionally, in February 2015 the Meeting for Creating a School that Fosters Dreams was organized consisting of around 30 people including the Manager of the Children's Education Section of the Board of Education, principals, vice principals and school councilors of both schools, PTA board members, the chairman of supporting group, head of the ward, school support volunteers, designers, and construction officials. This organization will continue to meet in the future with the goal of working to improve educational activities, enhancing the educational environment, and school utilization in collaboration with the local community. The building of inclusive facilities in which officials and concerned people participated for a period of six years has brought about a venue for those supporting inclusive schools.

The completion of facilities is not the final goal. This facility that became a reality thanks to the collective ideas of everyone involved has the power to spread these

concepts on inclusive education and open up new possibilities. The school is a place for learning and development for children, parents and the local community, regardless of disability, which in turn promotes interaction and activities. Creating an inclusive school involves creating a school that is comfortable for everyone.

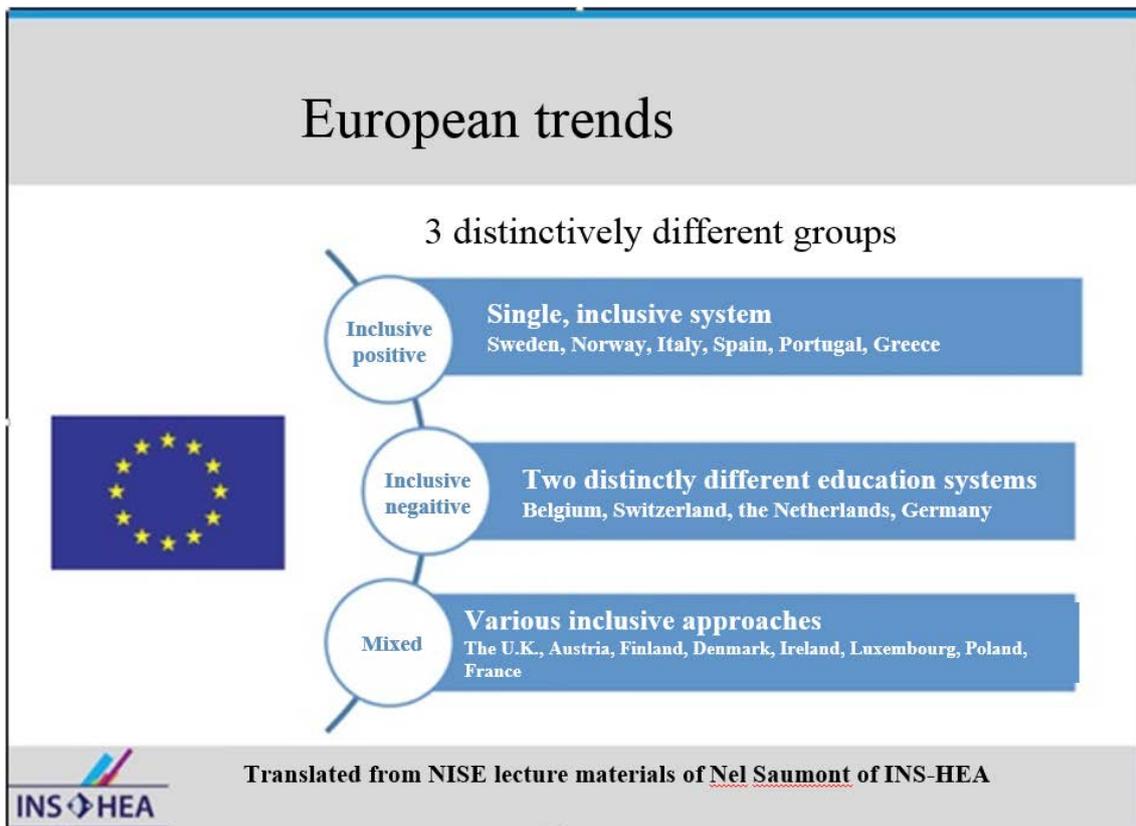
Campus Layout Map



Source: From the construction summary pamphlet for Itoigawa Municipal Itoigawa Elementary School and Hisui no Sato Integrated School

2-3 Current Situation of Building an Inclusive Education System in Finland (Contribution by Expert)

Each European country has a different approach to education of children with disabilities. The diagram below illustrates one way of categorizing the different approaches. In this diagram, the education system of European countries is grouped into one of three categories based on their distinct differences. Specifically, the groups are: (1) countries that aim for single track education with full inclusion and abolishing special needs schools, such as Italy; (2) countries with a high enrollment rate in special needs schools, such as Belgium and Germany, and (3) countries that provide a variety of learning settings to meet different needs, such as the U.K. and Finland.



*Source: Excerpt from the presentation materials of Nel Saumont (translated by NISE) for the National Institute of Special Needs Education (NISE) sponsored “2nd FY2014 Workshop on Educational Policy Trends in Other Countries” held on March 10, 2015.

Furthermore, Finland, which ranks high among European countries in the Programme

for International Student Assessment conducted by the OECD, has an education system categorized under the "mixed group" in the above diagram. This is the same as Japan, where a diverse learning environment that includes regular classes, special needs classes, and special needs education schools within the elementary and secondary school system is made available to suit the different needs of students.

Moreover, Finland's Special Education Schools Act became integrated into the Basic Education Act in 1998, thereby enabling students enrolled in special needs classes or special needs education schools to participate in regular classes within their capacities, where their type and degree of disability allow.

This section discusses the current situation of building an inclusive education system in Finland, which shares many similarities with Japan's education approach for children with disabilities.

Inclusive Education System in Finland

Aya Watanabe
Associate Professor
Tsuda College

Introduction

The purpose of this paper is to examine the current situation of the inclusive education system in Finland. There are varying definitions of inclusive education and inclusive education system, but this paper shall follow the definition of “a system whereby both pupils with and without disabilities learn together in the same place.” This definition is presented in the report released from the Special Committee of the Future Direction of Special Needs Education set up by the Central Council for Education’s Subdivision on Elementary and Lower Secondary Education entitled “Promotion of Special Needs Education in Building Inclusive Education System for Formation of an Inclusive Society”. This definition is also based on Article 24 of the Convention on the Rights of Persons with Disabilities.

Using this definition, this paper overviews the current situation of an inclusive education system in Finland from three aspects – (1) Legal regulations; (2) History of special needs education; and (3) Special needs education within the education system.

1) Legal Regulations

The fundamental philosophy behind inclusive education can be seen in laws. The first one to examine is the Constitution of Finland. The following clauses contain parts of Section 6 on equality and Section 16 on education, both of which are considered fundamental rights¹.

¹ *The Constitution of Finland*. Unofficial English translation by FINLEX (<http://www.finlex.fi/>).

Section 6 - Equality

Everyone is equal before the law.

No one shall, without an acceptable reason, be treated differently from other persons on the ground of sex, age, origin, language, religion, conviction, opinion, health, disability or other reason that concerns his or her person.

Children shall be treated equally and as individuals and they shall be allowed to influence matters pertaining to themselves to a degree corresponding to their level of development.

Section 16 - Educational rights

Everyone has the right to basic education free of charge. Provisions on the duty to receive education are laid down by an Act.

The public authorities shall, as provided in more detail by an Act, guarantee for everyone equal opportunity to receive other educational services in accordance with their ability and special needs, as well as the opportunity to develop themselves without being prevented by economic hardship.

Similar mention can be found in the Basic Education Act (*Perusopetuslaki*).

Section 3

Education shall be governed by unified national core curriculum in accordance with this Act.

Education shall be provided according to the pupil's age and capabilities so as to promote healthy growth and development in the pupil. (Amendment 477/2003)

Those providing education shall cooperate with pupils' parents/carers².

These legal regulations, that require all people to be treated equally and recognize the right of all people to receive a basic education, lay the foundation for promoting an inclusive education system.

² *Basic Education Act*. Unofficial English translation by FINLEX (<http://www.finlex.fi/>).

Photograph 1:
Children performing a music drama in a regular classroom



Photograph 2:
Learning in a regular classroom using a video magnifier



2) History of special needs education

The fundamental philosophy behind inclusive education can be seen in more than just legal regulations. The comprehensive school model introduced in the 1970s under education policy focused on equality so that every child could learn under a roof is also considered to form the “principle of inclusion” in Finland.³

According to the Finnish National Board of Education (2001), the development process for special (needs) education prior to the introduction of comprehensive schools (yhtenäiskoulu) was separated into three stages⁴. The first stage was the time period from 1840 when special education commenced until 1921 when the Compulsory Education Act took effect. In Finland, education for the hearing impaired began in the 1840s, education for the visually impaired in the 1860s, and education for people with orthopedic impairments in the 1890s. In 1866, local authorities were obliged to have folk schools (Kansakoulu), and while it became compulsory later, “many disabled children were excluded from the school.” At the time, education for children with disabilities was provided as a philanthropic activity by individuals or philanthropic organizations.

The second stage was the time period from 1921 when the Compulsory Education Act took effect until the end of World War II. The Compulsory Education Act stated that all

³ Eurydice: Finland (<https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/>) (viewed October 1, 2015)

⁴ National Board of Education. (2001) *The Education System of Finland 2001*. Helsinki: Hakapaino oy. “2. History of special needs education” of this paper is based on this book.

children were “subject to compulsory education, except for those children with intellectual disabilities.”

The third stage was the time period from the end of World War II to 1972 when the “comprehensive school” model was introduced. In addition to medical care and rehabilitation, a new form of vocational rehabilitation was developed. The expansion of special education and its specialization had been seen in this period. Furthermore, at the beginning of the 1970s, Sweden began introducing the principles of normalization and integration. Coupled with the introduction of comprehensive schools, which was taking place during this time, Finland began to work toward “school for all,” schools where all pupils could learn under one roof. Actually, the Comprehensive School Committee discussed plans to provide education for children with special needs in “mainstream schools.” The Committee report stated that this should be the case wherever possible.

The next stage is the 1980s when the Basic School Act (*Peruskoululaki*) (1983) was enacted. This act required local governments to provide basic education or equivalent opportunity for all pupils (Section 6). It also states that all pupils “have the right to attend basic school or the right to receive education equivalent to basic school in another form stipulated by law” (Section 32). As a result, in principle, all pupils were subject to compulsory education, but provisions for alternative education (care) for pupils with intellectual disabilities was stipulated in the Act on Special Care for Persons with Intellectual Disabilities (*Laki kehitysvammaisten erityishuollosta*), which was amended around the same time as the Basic Schools Act was enacted.

The National Core Curriculum for Basic School (*Peruskoulun opetussuunnitelman perusteet 1985*) issued around the same time states the individualization of education, opening the possibility of education provided for the individual needs of pupils. However, at this stage, the integration of curriculum had yet to be completed and curriculum for special needs education (at the time, the term “special education” was used) was compiled separately⁵.

In the 1990s, trends toward building an inclusive education system became more active. This represented the next step in initiatives that Finland had pursued until then. This change was strongly affected by international trends at the time, including the “principle

⁵ For example, “Curriculum for the hearing impaired” (Kouluhallitus. 1987. *Peruskoulun kuulovammaisten opetussuunnitelman perusteet 1987*. Helsinki: Valtion painatuskeskus.), etc.

of inclusion” and “schools for all, enrolling all children in regular class regardless of individual differences or difficulties” advocated in The Salamanca Statement and Framework for Action on Special Needs Education of 1994 and rising interest in “quality.” Around this time, holistic evaluations on the actual condition of special needs education (Laukkanen, et. al., 1996) took place and the results were utilized in later policy making.

There have been concrete steps taken to build an inclusive education system. One of these is the integration of the national core curriculum. Until then, the curriculum for special needs education was issued separately from that for basic schools, but since the revision of the National Curriculum (*Peruskoulun opetussuunnitelman perusteet 1994*) in 1994, those were merged together into a single set of curriculum. In addition, since 1997, education for children with severe intellectual disabilities that until then had been provided within the social welfare system as an exception noted as "special care" was changed to part of basic education.

Furthermore, in 1998 the Basic Schools Act was completely revised into the Basic Education Act that took effect the next year (1999). The new act was not based on basic “school” like the previous act, and instead as the name Basic “Education” Act indicates it targeted all forms of basic education. This fact also indicates the inclusive orientation of Finnish education.

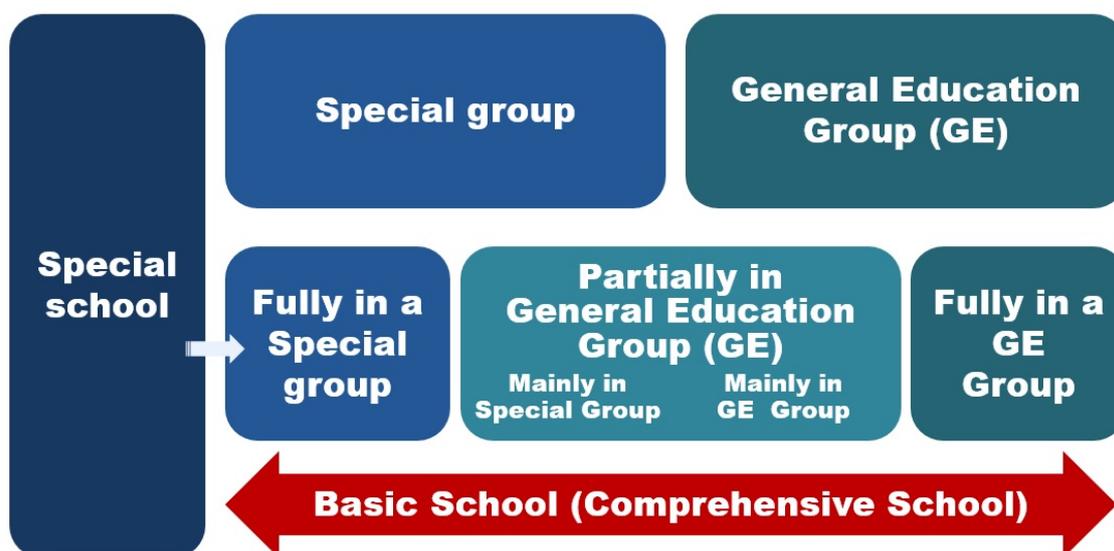
The movement to build an inclusive education system has continued after this. These efforts will be discussed below.

3) Special needs education within the education system

(1) Special Needs Education in Finland

Special needs education in Finland is provided at general schools (basic school: *Peruskoulu* in Finnish), special needs education classes (special group: *erityisryhmä* in Finnish) set up at general schools, and at schools for special needs education (special school: *erityiskoulu* in Finnish). The structure of this system is summarized in Figure 1 below.

Figure 1: Structure of Special Needs Education



(2) Special needs education seen from a quantitative perspective

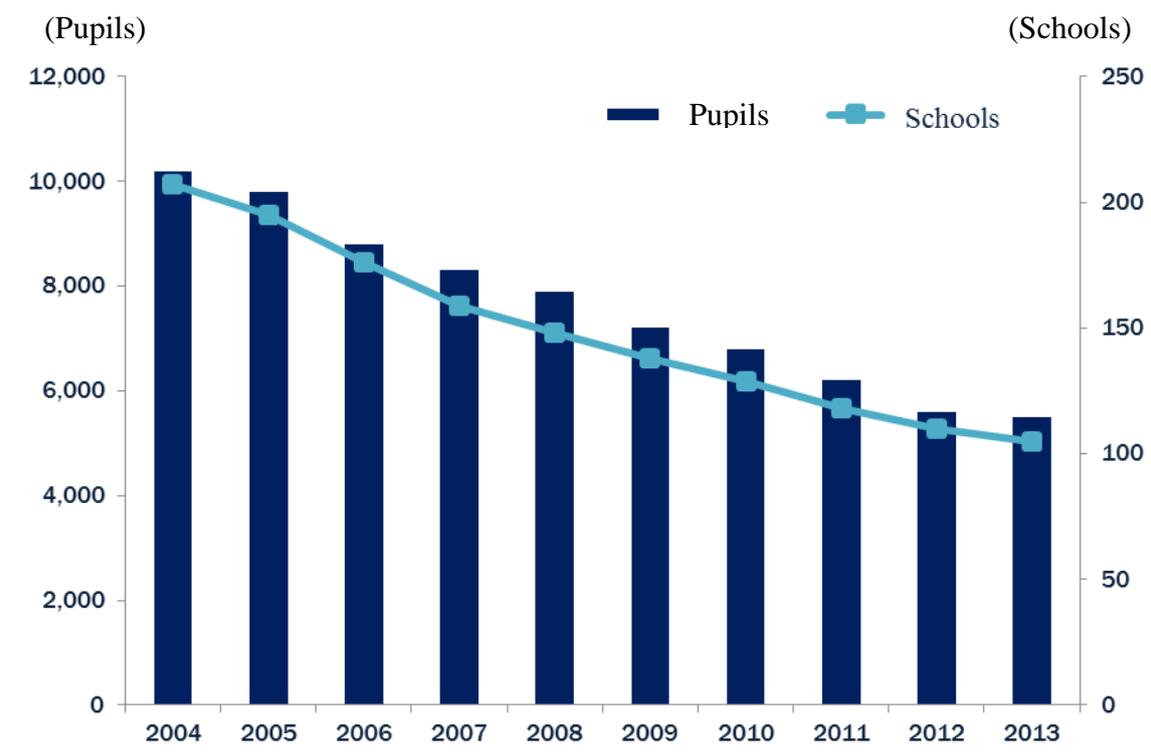
Of those institutions that provides special needs education, the number of special schools has rapidly declined in recent years (Table 1 and Figure 2). This is because of the following three factors: (1) the place of provision of special needs education is shifting to the special group or general education group in basic schools in line with the spread of the philosophy of inclusive education; (2) special schools are being merged with basic schools as part of the school consolidation effort taking place under the overall education system; and (3) this trend is being promoted by rationalization resulting from government decentralization. As a result, the number of special schools has been halved over the past 10 years (Table 1).

Table 1: Number of institutions by type of educational institution 2004-2014

Types of educational institution	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Basic school	3476	3347	3180	3067	2988	2889	2785	2719	2644	2576	2498
Basic school level Special school	207	195	176	159	148	138	129	118	110	105	99
Upper secondary school	436	428	418	406	406	398	395	388	381	374	366
Basic school + Upper secondary school	37	37	37	37	38	38	38	39	41	41	42
Vocational institution	187	182	173	161	152	137	132	129	124	120	105
Special vocational institution	13	13	13	12	12	6	6	6	6	6	6
Specialized vocational institution	42	40	38	37	37	35	34	34	34	34	33

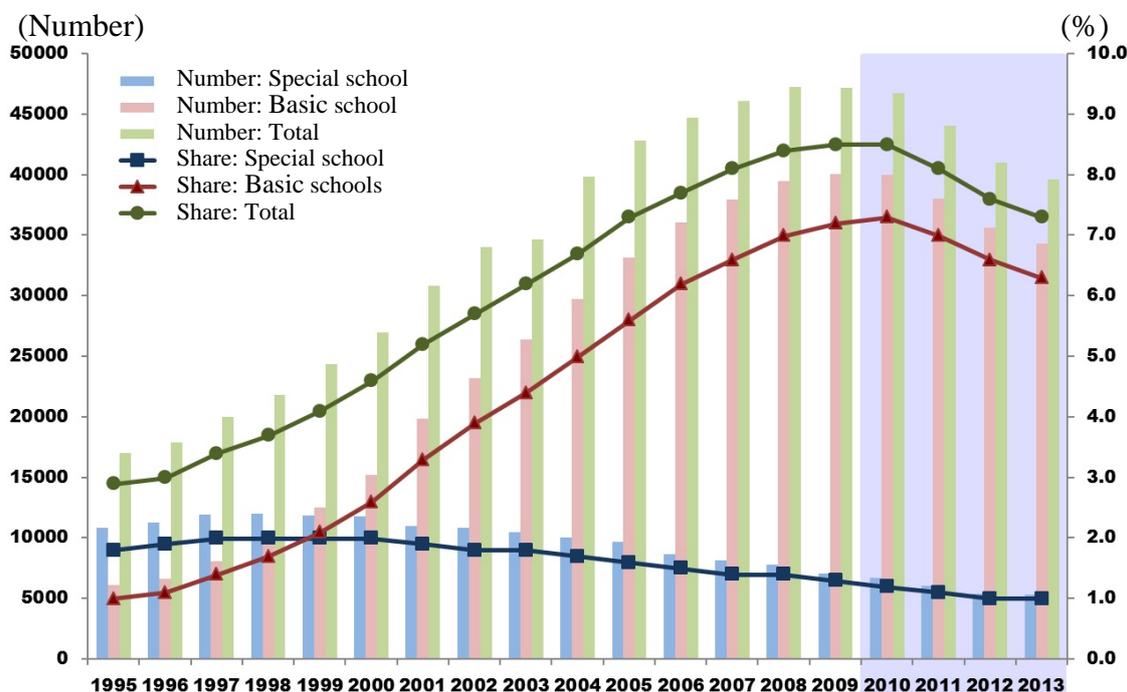
Source: Statistics Finland website (<http://www.tilastokeskus.fi/>) [date of last view: June 1, 2015]

Figure 2: Number of pupils attending special schools and the number of schools



Source: Statistics Finland website (<http://www.tilastokeskus.fi/>) [date of last view: June 1, 2015]

Figure 3: Pupils having received full-time special support 1995-2013



Source: Statistics Finland website (<http://www.tilastokeskus.fi/>) [date of last view: June 1, 2015]

The number of schools is not the only data set declining. The number and share of pupils receiving full-time special support has also experienced a downward trend since 2010 (Figure 3). This trend is believed to be influenced by fiscal system for education that was reformed over this same time.

Finland’s fiscal reform implemented in 2010 changed the conventional structure to one where financial administration of the national portion of costs related to public services provided by local governments, including education, healthcare and social welfare, was shifted to local governments⁶. Within this reform process, changes were made to the general funding sources of education and calculation models as well as the weighting indicators used to reflect the regional conditions when calculating educational budget. This resulted in the elimination of indicators related to special needs education, such as the number of pupils with a severe intellectual disability, the number of pupils with other

⁶ For details about this reform process, refer to Aya Watanabe. (2014) “Finland’s Education Administration Systems” (Kono, Kazukiyo, *New Education Administration*, Minervashobo, p. 225-235) and Aya Watanabe. (2013). “Finland” (Ministry of Education, Sports, Science, Culture and Technology, *Education Administration Finance in Other Countries – Comparison of Japan and 7 Other Countries*, The Earth Kyoikushinsha, p. 215-235).

disabilities, and the number of pupils with special needs (having received special needs education in a broad sense, including learning support, remedial teaching, etc.). At the same time, reform took place that introduced a new special needs education system with three stages, and while the Ministry of Education and Culture allocated budget for the promotion of special needs education as a project budget, the change from ordinary budget to temporary budget will have an effect on the future of special needs education initiatives.

This reform can be interpreted in two ways from the perspective of special needs education. First is the interpretation that views special needs education as universal. Special needs education, of course, must be provided by each local government and each school, and with this understanding it will be incorporated into daily efforts. The new system enables this awareness and understanding.

Second is the interpretation that views a comparative decline in the importance of special needs education. Education budget is allocated as a block grant, so removing the indicators on special needs education will not necessarily mean an immediate decline in the budget for special needs education. However, it is a fact that the government has been aware of the importance of accommodating special needs education in terms of both fiscal administration and practice by using related indicators. In fact, the percentage of pupils having received general support, the broad definition of special needs education, has declined since the reform. Of course, this could also mean the number of pupils requiring support is declining. But given the data indicates this percentage was expanding quite steadily, there is a possibility that services are not reaching where they should.

A determination regarding this assumption cannot be made without a sufficient examination of the facts. In this manner, attention must be paid on the impact and influence of these changes on special needs education and the building of an inclusive education system in the future.

(3) New Framework for Special Needs Education

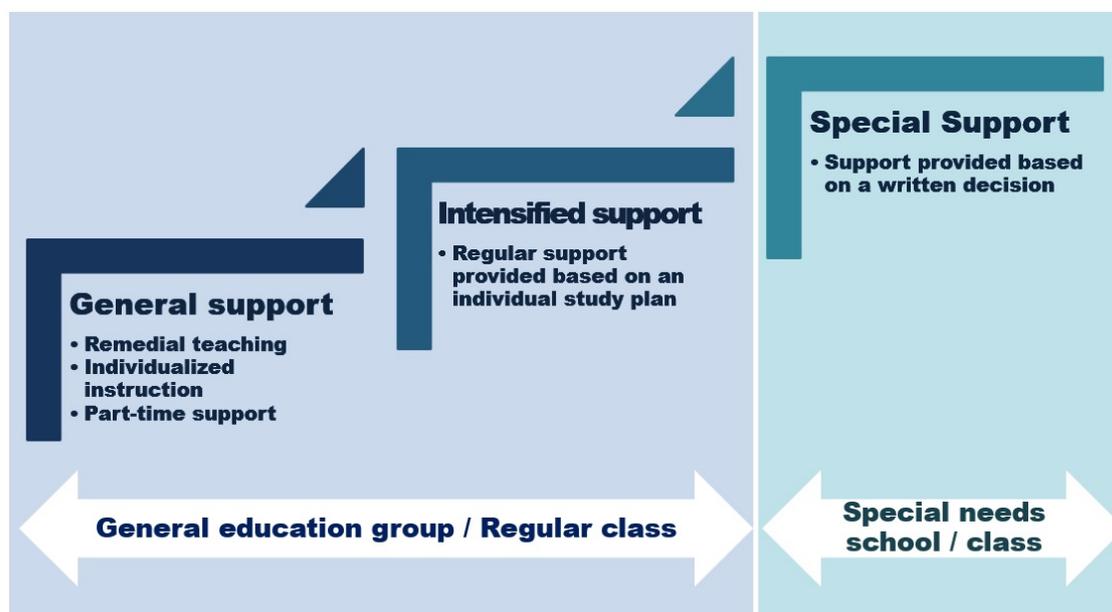
Special needs education is witnessing change not only as discussed above but also with regard to the framework by which it is provided. On March 14, 2006, the Ministry of Education appointed a steering group to consult the long-term strategy for developing special needs education at the pre-primary and basic education level. As a result, the steering group issued a report entitled *Special Education Strategy (Erityisopetuksen strategiaarviointiaineisto)* in which it recommended the need for early intervention, early support and “stepped-up support” as well as enhancement of teacher training. In 2010, the Basic Education Act was revised following this report (enacted in 2011), ushering in a new framework for special needs education.

The new framework suggests three stages of special needs education: (1) general support (Tukiopetus ja osa-aikainen erityisopetus); (2) intensified support (Tehostettu tuki); and (3) special support (Erityinen tuki) (Table 4). General support includes a remedial teaching provided short-term support for “a pupil temporarily fallen behind in studies” and a part-time support given to “a pupil who has difficulties in learning and schooling (Section 16 of the Basic Education Act).

In other words, this means support provided in class and daily learning support such as remedial teaching and individualized support, by a teacher, special needs teacher (erityisopettaja) or school assistant. Intensified support is provided to pupils who required regular support for learning, and it is provided based on a plan made for each individual (Section 16a of the Basic Education Act). Special support is considered as special needs education (Section 17 of the Basic Education Act).

Of these stages, general support and special support have been provided conventionally. Intensified support was newly established as a stage in between these two based on the growing number of pupils requiring support and the diversification of their needs.

Figure 4: New Framework of Special Needs Education



Source: Prepared by the author, based on *Basic Education Act*.

Photograph 3: Example of general support (1)



After-school support by a special education teacher

Photograph 4: Example of general support (2)



Remedial teaching by a special teacher

Photograph 5:
Special needs education classroom



Photograph 6:
Desk of a pupil in special needs education classroom

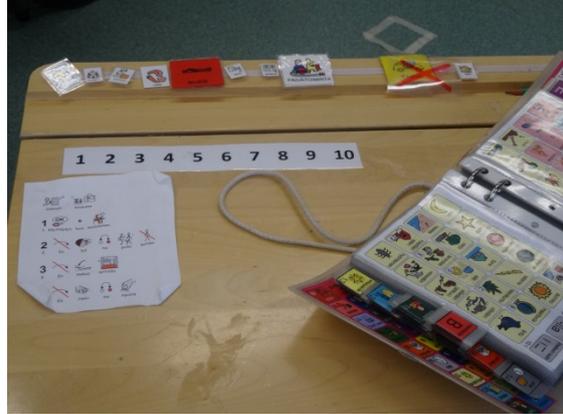
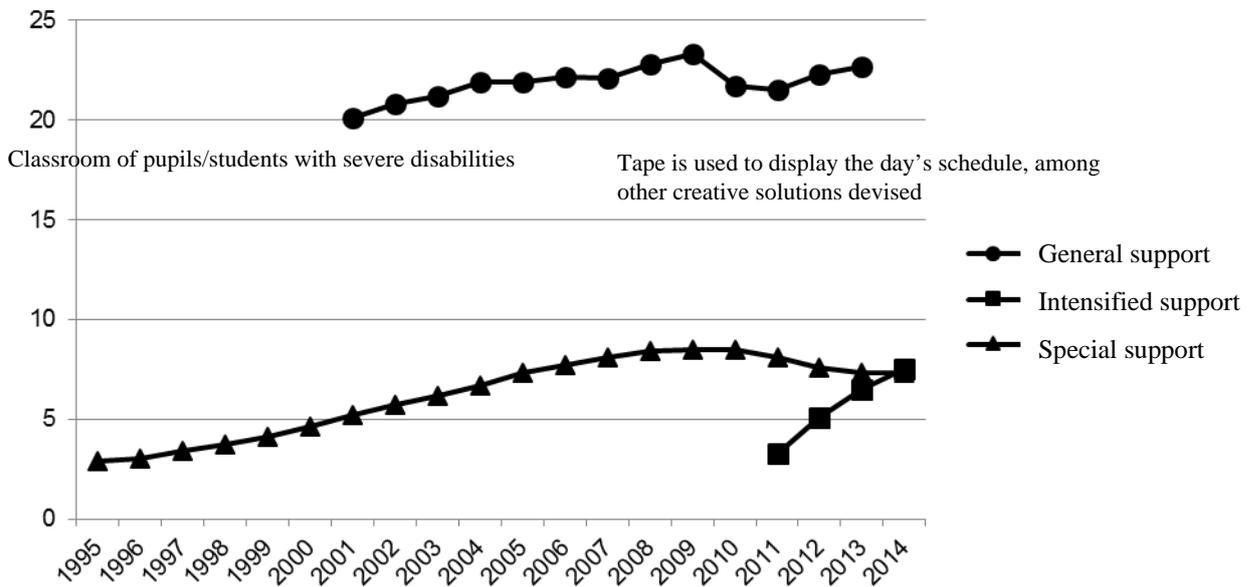


Figure 5: Pupils having received general support, intensified support and special support 1995-2014



Source: Statistics Finland website (<http://www.tilastokeskus.fi/>) [date of last view: October 1, 2015]

Figure 5 above details changes that have taken place in the number of pupils having received educational support. According to this, pupils who received “special support”

had continued to increase, but this growth was stopped after the introduction of the “intensified support” as an intermediate stage between “general support” and “special support.” Meanwhile, the numbers for “intensified support” have continued increasing since this category was introduced. Given this, this new category can be seen as fulfilling a strong need on the frontlines of special needs education.

Table 2 and Table 3 present the number and percentage of pupils having received “intensified support” and “special support” by the stage of education and by gender. These tables indicate that the percentage of pupils who received special support increases as the grade in school goes up. They also indicate that boys occupy a larger percentage of those receiving support than girls.

Table 2: Pupils having received intensified or special support by stage of education (2013)

Grades	Intensified support		Special support		Intensified support + Special support		Number of pupils in basic school
	Numbers	%	Numbers	%	Numbers	%	
Pre-primary education	193	1.6	907	7.7	1.100	9.3	11,776
Grades 1-6	24,256	6.9	22,251	6.3	46,507	13.2	351,663
Grades 7-9	10,538	6.0	16,275	9.2	26,813	15.2	176,008
Additional education	46	4.5	201	19.5	247	24.0	1,030
Total	35,033	6.5	39,634	7.3	74,667	13.8	540,477

Source: Statistics Finland website (<http://www.tilastokeskus.fi/>) [date of last view: June 1, 2015]

Table 3: Pupils having received intensified or special support by gender (2013)

Gender	Intensified support		Special support		Intensified or Special support		Number of pupils in basic school
	Number	%	Number	%	Number	%	
Boys	22,762	8.2	27,575	10.0	50,337	18.2	277,056
Girls	12,271	4.7	12,059	4.6	24,330	9.2	263,421
Total	35,033	6.5	39,634	7.3	74,667	13.8	540,477

Source: Statistics Finland website (<http://www.tilastokeskus.fi/>) [date of last view: June 1, 2015]

Table 4: Part-time special education, remedial teaching, and special needs assistance and interpretation services received by pupils having received intensified or Special support (2013)

Type of support	Intensified support		Special support		Intensified support / Special support	
	Number	%	Number	%	Number	%
Part-time special education	25,813	73.7	14,609	36.9	40,422	54.1
Remedial teaching	19,813	56.6	13,292	33.5	33,105	44.3
Special needs assistance and/or interpretation services	14,621	41.7	22,455	56.7	37,076	49.7
Other forms of support than those mentioned above	9,016	25.7	10,576	26.7	19,592	26.2

Source: Statistics Finland website (<http://www.tilastokeskus.fi/>) [date of last view: June 1, 2015]

Looking at the content of support received as intensified support or special support (see Table 4), part-time special education was received the most as intensified support, followed by remedial teaching. However, “special needs assistance and / or interpretation services” was used the most as special support.

Next, the number of pupils having received special support by the place of provision of teaching is examined. Pupils who study fully in a special group (both in special school and in other than special school) occupied the largest number, followed by pupils in categories with a higher percentage of studying in a general education group (fully or more than 50%) (see Table 5). This table clearly shows that close to 40% of the pupils receiving special support, for those with the most severe stages within the framework of special needs education; spend most of their time (more than 50%) in a regular classroom. This trend is evident in the content of education. Close to half of students take part in classes following the general education syllabuses (see Table 6).

Table 5: Pupils having received special support by place of provision of teaching (2014)

Place of provision of teaching	Pre-primary education	Grade 1-6	Grade 7-9	Additional education	Total	
					Number	%
Teaching fully in a general education group	219	4,485	2,786	24	7,514	19.1
51-99% of teaching in a general education group	67	3,175	3,981	1	7,224	18.3
21-50% of teaching in a general education group	23	2,125	1,954	5	4,107	10.4
1-20% of teaching in a general education group	19	2,801	1,964	4	4,788	12.1
Teaching fully in a special group, other than special school	388	7,158	3,392	38	10,976	27.8
Teaching fully in a special group. special school	202	2,619	1,898	92	4,811	12.2
Total	918	22,363	15,975	164	39,420	100.0

Source: Statistics Finland website (<http://www.tilastokeskus.fi/>) [date of last view: October 1, 2015]

Table 6: Pupils having received special support by subject syllabus (2014)

Subject Syllabus/studying according to functional areas	Grade 1-6	Grade 7-9	Additional education	Total	%
All subject syllabuses are general education syllabuses	12,528	5,671	34	18,233	47.4
Individualized syllabus for one subject	2,209	3,045	5	5,259	13.7
Individualized syllabus for 2-3 subjects	2,354	2,471	10	4,835	12.6
Individualized syllabus for at least four subjects	3,954	4,085	63	8,102	21.0
Pupil studies according to functional areas	1,318	703	52	2,073	5.4
Total	22,363	15,975	164	38,502	100.0

Source: Statistics Finland website (<http://www.tilastokeskus.fi/>) [date of last view: June 1, 2015]

Conclusion

This paper took a closer look at the Finnish approach towards the building of inclusive education system. This approach based on a universal school model known as “comprehensive schools” indicates: (1) The place of teaching is gradually shifting from special schools to basic schools and (2) given the broadening meaning of “all” in “schools for all”, steady progress is being made with initiatives to realize “schools for all.” However, while progress is being made with “inclusiveness” at the school level, this paper showed that within schools many pupils with special needs still received education outside of the regular classroom. This means that the “inclusiveness” of classrooms

where daily learning takes place is still limited in nature from the perspective of achieving the vision of “classes for all.”

Finland is still in the process of building an “inclusive education system.” However, it is quite interesting that Finland aims to provide education based on the needs of individual pupils under one roof and is implementing these initiatives as part of its holistic support measures for children based on a broader definition of special needs education.

References:

- Holopainen, Pirkko and Prkko Virtanen (toim.). (2002). *Erityisopetuksen laadullisen kehittämisen hanke 1997-2001: Malleja opetukseen*. Helsinki: Opetushallitus.
- Kouluhallitus. (1985). *Peruskoulun opetussuunnitelman perusteet 1985*. Helsinki: Valtion painatuskeskus.
- Louekoski, Hannele (toim.), Raukkanen, Reijo and Aslak Lidström. (1996). *Erityisopetuksen arviointiaineistoa*. Helsinki: Opetushallitus.
- National Board of Education. (2001) *The Education System in Finland 2001*. Helsinki: Hakapaino oy.
- Opetushallitus. (1994). *Peruskoulun opetussuunnitelman perusteet 1994*. Helsinki: Opetushallitus.
- Opetusministeriö. (2007). *Erityisopetuksen strategia*. Helsinki: Yliopistopaino.
- Raukkanen, Reijo and Aslak Lidström. (1996). *A Comprehensive evaluation of special education in Finland*. Helsinki: National Board of Education.
- UNESCO. (1994) *The Salamanca Statement and Framework for Action on Special Needs Education*. Adopted by the World Conference on Special Needs Education: Access and Quality, Salamanca, Spain, 7-10 June 1994.

Chapter 3 - Points of Caution about the Provision of Reasonable Accommodation for Facilities/Equipment

The July 2012 Central Council for Education's Subdivision on Elementary and Lower Secondary Education report discusses 11 viewpoints on education content and method, support system, as well as facilities and equipment based on the objective of reasonable accommodation. In terms of facilities and equipment, consideration is given to: (1) creating an accessible/barrier free school environment; (2) providing facilities and equipment that enable instruction of pupils/students in accordance to the condition and characteristics of pupils/students' development and disabilities; and (3) ensuring necessary facilities and equipment for disaster preparedness. Beside facilities and equipment, the report indicates a specialized instruction system and appropriate human resource appointment (teachers' aides) should be implemented. Furthermore, the utilization of educational resources available within and outside of schools, and collaboration with relevant agencies should be implemented. Also, efforts to promote understanding among parents, and community members are also indicated. Reasonable accommodation provided should include an appropriate combination of resources with due consideration to facilities and equipment.

With a focus on the physical environment, including facilities and equipment, this research examined case examples of approaches taken by schools in each region aimed at building an inclusive education system that provides "reasonable accommodation" through school facilities that cater to the various special needs of pupils/students with disabilities.

While most of the schools examined already have the basic physical environment set up to be universally accessible, including slopes, elevators, handrails, and multifunction toilets, it was found that some schools have only recently installed slopes, toilets, and cool down spaces as new features as part of their reasonable accommodation.

Meanwhile, there were also cases where reasonable accommodation was implemented through creative utilization of existing rooms or classroom layout without major physical construction. Creative ingenuity was also evident in the implementation of reasonable accommodation in each school depending on the school establisher's or school's situation as well as their pupils/students' conditions and learning needs.

This chapter summarizes areas of consideration when providing reasonable accommodation through school facilities and equipment for the building of an inclusive education system based on analysis of data and insight obtained from the onsite survey and questionnaire.

3-1 Development of a Plan/Design Process for the Provision of Reasonable Accommodation

(1) Consensus building between stakeholders

Schools that conduct parent interviews prior to a student's enrollment, which enables the evaluation of the student's condition and confirmation of parental requests with regard to the school's provisions including facilities, foster a sense of trust from the parents of pupils/students attending the school. This indicates the importance of a thorough consultation process between parents, school establisher, and teaching staff to evaluate the level of reasonable accommodation necessary for the student entering into a regular school as per Article 22-3 of the Ordinance for Enforcement of the School Education Act.

In the case studies of the two integrated facility plans discussed in Chapter 2, both the facility plans were developed by gathering input from a variety of stakeholders in this matter, including holding committee meetings consisting of local residents, experts, PTA members, and school staff, and hosting workshops involving the teaching staff and community members. Facilities designed in the manner have a very well laid out basic environment that includes barrier free access, space for interaction, integrated zoning concepts, and effective location of cool down areas for students, which once again highlights the importance of the consensus building process between all stakeholders.

(2) System and fiscal considerations

The Basic Policy for Eliminating Discrimination against Persons with Disabilities (approved by the Cabinet on February 24, 2015) requires that comprehensive and objective determinations be made regarding excessive burdens based on specific situations and conditions given personal and systematic restrictions and fiscal and financial situation of individual circumstances.

The cases studies studied by this research focus on school facilities and equipment funded for the most part by the budget of school establishers. It is believed to be effective to utilize national government subsidies for creating barrier free accessible facilities (slopes, elevators, multifunction toilets, etc.) and examine to see if the administrative system is able to fully utilize the functions of these facilities and equipment after they are installed.

Examining not only changes associated with facility installation but the effective utilization of existing facilities and creative ingenuity shown in handcrafted facilities is also believed to be effective.

(3) Creating and revising facilities plans

The cases studies studied by this research report that through consensus building with school establishers, schools and parents reasonable accommodation is being provided following systematic renovations of toilets and sinks and installation of necessary handrails, etc., in conjunction with changes in classroom location as pupils with disabilities age and proceed to the next grade level. Facilities plans should be created and revised with consensus building involving school establishers, schools and parents in line with the creation and revision of educational support plans to accommodate pupils with disabilities as they advance grade levels.

In particular, school establishers and schools need to heed sufficient attention toward differing natures of support as time passes because the condition or symptoms of the disability may change with the developmental stage or growth of individual pupils/students with disabilities, and it would be effective for school establishers and schools to review the facilities plan as needed.

3-2 Examination of Reasonable Accommodation and Improvement of the Basic Environment

(1) Ways of interpreting reasonable accommodation and improvement of the basic environment

Accommodation provided to specific disabilities sometimes took the form of reasonable accommodation but other times took the form of improvement of the basic environment. It was found that the same initiative (slope, toilets, FM hearing aids, etc.) could be interpreted as reasonable accommodation for specific pupils/students with disabilities or as improvement of the basic environment depending on the situation of the establisher or school.

Therefore, when examining a case, instead of using strict categories for reasonable accommodation and improvement of the basic environment the perspective of whether both together are providing the necessary accommodation or not is needed.

Also, the provision of reasonable accommodation is necessary on an individual basis in line with the condition of each individual pupil/student with disabilities. Therefore, attention must be paid to the fact that accommodation using the same facilities and equipment can have differing degrees of effectiveness based on the type of disability.

(2) Effectiveness of improving the standards of facilities qualitatively

Working to improve the basic qualitative standards of school facilities, such as sounds, temperature, and securing necessary spaces, is believed to be linked with the provision of accommodation to all pupils/students, including those with disabilities, from the standpoint of building an inclusive education system of the future.

(3) Trends in improvement of the basic environment

Most cases of facility/equipment initiatives involving construction to a building were considered to be improvement of the basic environment. (Slopes, elevators, multifunction toilets, wheelchair accessible parking spaces, etc.) These forms of accommodation are presumed to have been installed at schools from the perspective of creating barrier free and accessible spaces until now.

3-3 Provision of an Accessible Environment Inside Schools

As for creating barrier free spaces, most initiatives are considered improvement of the basic environment and initiated in order to provide an additional level of convenience to

many and unspecified facility users. Of those considered reasonable accommodation for pupils/students, the use of slopes, handrails, multifunction toilets, Braille floor tiles, cool down spaces, and cushioning to mitigate noises are believed to be effective for pupils/students with other types of disabilities or pupils/students without disabilities.

In providing reasonable accommodation, the incorporation of universal design for a diverse range of users makes it possible for use by many and unspecified number of people as a result, which then becomes improvement of the basic environment. Therefore, this is believed to be effective.

3-4 Accommodation of Development/Disability Condition and Characteristics

The nature of accommodation based on the condition or characteristics of development or disability varies widely based on the type of disability. As for the provision of space, as is seen with the provision of a space for individual learning or cooling down, there were cases seen in which a space to conduct individual instruction or calm down was provided to the applicable pupil/student. In order to secure these spaces, it is effective to utilize existing facilities by using screens to partition a corner of the classroom or using existing classrooms for a different purpose to secure the space needed.

For the provision of teaching material and teaching equipment, the following three points are believed to be beneficial toward effective learning. (1) Braille books and teaching equipment on Braille, (2) FM hearing aid receiver that helps to understand speech and acquire speech, and (3) utilization of ICT equipment (computers, tablet devices, digital blackboards) for promoting understanding while compensating for problems with seeing, reading or writing.

As examples of creative ingenuity used for signage planning, some case studies involved creating multiple entrances and assigning different colors to them, displaying the number of stairs in a circle at the bottom of the stairway, and using pictograms to display the toilet. This indicates the importance of planning signage that accommodates ease of understanding in mobility and living based on the condition of the disability.

3-5 Disaster and Emergency Response

As for disaster and emergency response, (1) classrooms are located on the first floor to provide the shortest possible evacuation route or on the top floor next to the elevator in tsunami prone areas; (2) postings and signs are used to clearly indicate the evacuation route, and (3) preparations have been made for necessary evacuation equipment such as stretchers and wheelchairs. Furthermore, as is the case with conducting evacuation drills regularly and providing human support during evacuations, it is necessary to have both hard and soft measures in place in order to increase the effectiveness of measures.

3-6 Accommodation for Supporting Interaction and Cooperative Learning

(1) Creative ingenuity in classroom location

Cases where the location of regular classrooms and special needs education classrooms were flexibly changed to the same floor based on advancements in grade represent examples of creative zoning so that interaction and cooperative learning involving pupils/students with disabilities and those without can continually take place. Depending on the type of disability, it is important to fully examine ahead of time all aspects, including funding, given the need for facilities that accommodate access, toilets and washrooms based on changes in the floor.

Additionally, as with cases where unifying zoning and spaces for interaction were incorporated from the perspective of interaction and co-existence, creative facility planning demonstrates that facilities can function as an effective means to aiding the daily interactions of pupils/students.

When flexibly changing classroom location, it is important to conduct a simulation of interaction in terms of learning and living between pupils/students enrolled in regular classes and pupils/students with disabilities enrolled in special needs education classes, based on the condition of each disability, so as to achieve sufficient accommodation in terms of safety.

(2) Enhancements in accessibility (lanes) and spaces for interaction for learning and

play together

From the examples of complex facility plans introduced in Chapter 2, spaces for interaction are planned as venues for encouraging play and natural activity as well as a place where pupils/students can gather freely in order to develop the spirit of learning together and mutual aid, regardless of disability. At the same time, accessibility spaces such as hallways and stairways and approach spaces for entering/leaving the school are not considered simple forms of access (lanes), they are creatively designed as spaces underpinning natural interaction during school life. These design approaches are considered to be effective in space planning.

Similarly, from the examples of complex facility plans introduced in Chapter 2, it is effective to plan and design accessibility methods fully considerate of pupils/students with disabilities, such as alleviating the difficulty of accessibility due to weather by installing a roof over outdoor slopes at entrances in order to provide excellent spaces for getting around.

3-7 Responses using Ingenuity/Innovation Unrelated to Facilities

(1) Responses by the effective utilization of existing facilities

As an accommodation to ensure a place to go to calm and cool down, cases were seen where a small room was set aside, multipurpose room utilized, or space created inside the classroom using screens. The fact there were cases where existing classrooms were used for space instead of building new spaces through construction work demonstrates the effectiveness of utilizing existing facilities.

(2) Responses by changing the location of classrooms

As with cases of laying out the same zone by flexibly changing the location of regular classrooms and special needs education classrooms as pupils/students advance grades in order to support interaction and cooperative learning, it is effective to examine measures for creative zoning that are effective and do not require facilities to be modified.

(3) Responses through creative ingenuity, such as handrails, etc.

As with cases where schools used creative ingenuity, such as elongating the flush lever based on the pupils using it, using signs and postings to convey information easily and visually, attaching tennis balls to the legs of desks and chairs to mitigate sounds, and the use of slopes to minimize level differences, these initiatives can be viewed as effective.

Works Cited:

- Central Council for Education Subdivision on Elementary and Lower Secondary Education report “Promotion of Special Needs Education in Building Inclusive Education System for Formation of a Convivial Society,” July 2012
- Basic Policy for Eliminating Discrimination against Persons with Disabilities (approved by the Cabinet on February 24, 2015)

Fundamental research on school facilities for building an inclusive education system (Summary) March 2016

This report contains a summary of points of caution related to the provision of reasonable accommodation for school facilities/equipment based on a questionnaire conducted on methods of reasonable accommodation in school facilities depending on the type of disability pupils/students with disability and an analysis of case studies undertaken as part of a National Institute for Educational Policy Research project, in line with the Central Council for Education's report* and the Act on the Elimination of Disability Discrimination.

*Promotion of Special Needs Education in Building Inclusive Education System for Formation of a Convivial Society (July 2012)

Chapter 1 – Background and Objective

July 2012 – Central Council for Education's report – Need to conduct research on reasonable accommodation and create a database
 August 2013 – Revision of Ordinance for the Enforcement of the School Education Act – Revised methods for selecting a school of enrollment
 April 2016 – Enforcement of Act on the Elimination of Disability Discrimination – Obligation to provide reasonable accommodation

● Pupils/students with disabilities are able to use general school facilities, including regular classrooms at public elementary and junior high schools

Need to provide reasonable accommodation in school facilities based on the type of disability of the pupil/student

● Research conducted to contribute to reviews of reasonable accommodation concerning school facilities/equipment by local governments and the formulation of response guidelines

Chapter 2 – Status of Efforts concerning Facilities/Equipment

2-1 Questionnaire

(1) Objective

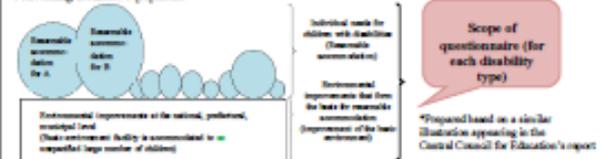
Obtain basic knowledge about the types of facilities/equipment, installation location, costs, and other factors regarding methods of reasonable accommodation and improvement of the basic environment at school facilities based on each type of disability, with the goal of creating a database of this information (109 case studies).

(2) Subjects

Designated areas and schools adopted in MEXT's FY2013 Model Project for Inclusive Education System Development.

(3) Details

Understand efforts with regard to reasonable accommodation and improvement of the basic environment concerning facilities/equipment.



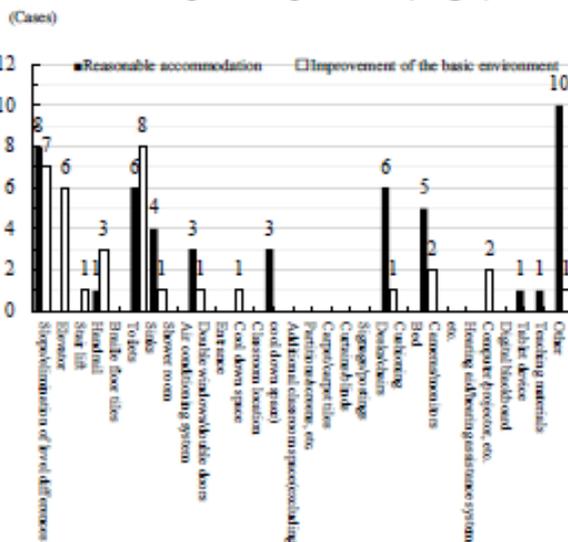
(4) Results: Details of reasonable accommodation concerning facilities/equipment first conducted at schools subject to this study were organized and analyzed according to each type of disability of pupils/students with disabilities (10 types).

*The 10 disabilities are: visual impairment, hearing impairment, intellectual impairment, orthopedic impairment, frailty/physical weakness, speech impairment, autism, emotional impairment, learning disability, and attention-deficit/hyperactivity disorder.

The study found that in the case of each disability type that reasonable accommodation was being provided in terms of the installation of facilities/equipment mainly for accessibility inside the school, learning, living and safety. The following represents the analysis details of orthopedic impairments as one example.

Content analysis of Orthopedic impairments (8cases)

Orthopedic impairment (single)



a. Cases of reasonable accommodation

- Slopes (including portable slopes) are installed in places with level differences in high traffic areas or level differences are eliminated at entrances in consideration of various modes of transport used, such as wheelchairs or support apparatuses (walkers or canes).
 - An air conditioning system is installed to ensure good classroom environment conditions ideal for regulating body temperature for pupils/students who have difficulty maintaining their body temperature.
 - Installation of multifunction toilets, beds for resting or changing clothes, and furniture such as desks and chairs with adjustable heights.
 - Special needs education classes and ordinary classes are located in close proximity on the same floor for the same grade in order to provide an environment that is easy to learn in and promotes mutual aid among pupils/students regardless of disability. In addition, the classroom location plan was created in a flexible manner with interaction in terms of interaction between learning and living in mind.
 - Necessary facilities/equipment are installed systematically in conjunction with changes in the restroom used or new traffic areas created from changes in classroom location.
 - Creativity is used in classroom location to ensure that evacuation routes can be followed in the shortest time possible in order to alleviate difficulty in mobility during a disaster/emergency.
- Necessary facilities/equipment are installed, such as handrails, and necessary supplies for after a disaster/emergency occurs are also on hand and available, including wheelchairs and stretchers.

b. Cases of improvement of the basic environment

Basic school facilities have been made accessible/barrier free, such as the availability of slopes, elevators, handrails, accessible bathrooms, and floors remain the same height throughout.

2-2 Facilities Plan for Combined Public Elementary Schools and Special Needs Education Schools (Contribution by an Expert)

- (1) Tokamachi Municipal Tokamachi Elementary School / Fureai no Oka Special Needs Education School / Tokamachi City Developmental Assistance Center (Jun Ueno, President, Tokyo Metropolitan University)
- (2) Itoigawa Municipal Itoigawa Elementary School / Hivui no Sato Integrated School (Satoru Nagasawa, Professor Emeritus, Toyo University)

2-3 Current Situation of Building an Inclusive Education System in Finland (Contribution by Expert)

- (1) The current situation in Finland is analyzed and introduced because the country shares many similarities with Japan, including approaches to education of children with disabilities. Finland is also among the top countries in Europe on the PISA. (Aya Watanabe, Associate Professor, Teikyo College)

Chapter 3 – Points of Caution About the Provision of Reasonable Accommodation for Facilities/Equipment

1	Development of a Plan/Design Process for the Provision of Reasonable Accommodation	<ul style="list-style-type: none"> ⇒ Importance of consensus building among stakeholders ⇒ Comprehensive/objective judgment based on system and fiscal considerations ⇒ Revising facilities plans based on the developmental stage and growth
2	Examination of Reasonable Accommodation and Improvement of the Basic Environment	<ul style="list-style-type: none"> ⇒ Provide necessary accommodations that include both reasonable accommodation and improvement of the basic environment ⇒ The same accommodations for facilities may provide different benefits based on the type of disability ⇒ Accommodate all pupils/students by improving the qualitative standards of facilities
3	Provision of an Accessible Environment Inside Schools	<ul style="list-style-type: none"> ⇒ Accommodation incorporating the concept of universal design for various users
4	Accommodation of Development/Disability Condition and Characteristics	<ul style="list-style-type: none"> ⇒ Utilize space, such as existing classrooms, to provide accommodations ⇒ Design plan that is easy to understand (intuitive) in terms accessibility and living
5	Disaster and Emergency Response	<ul style="list-style-type: none"> ⇒ Ensure shortest evacuation route by locating the classroom on the first floor ⇒ Use postings/signage to indicate evacuation route in easy-to-understand manner ⇒ Have on hand necessary evacuation equipment, such as stretchers and wheelchairs ⇒ Respond in terms of both hard and soft aspects to increase effectiveness
6	Accommodation for Supporting Interaction and Cooperative Learning	<ul style="list-style-type: none"> ⇒ Use creative classroom locations to promote daily interaction between pupils/students ⇒ Safety considerations should be given when flexibly changing the location of classrooms ⇒ Enhancements in accessibility and spaces for interaction that promote learning and playing together
7	Responses using Ingenuity/Innovation Unrelated to Facilities	<ul style="list-style-type: none"> ⇒ Effectively utilize existing facilities, by using screens or other existing classrooms ⇒ Achieve creative zoning by reviewing classroom location

Establish database on school facilities supporting the building of an inclusive education system (inclusive school facility database)

● The 109 case studies subject to analysis can be searched by disability type, enrollment status, reasonable accommodation, and installation status of facilities/equipment. The following presents one example.

Reasonable accommodation	Barrier free/ accessibility of indoor environment	<p>Urinal at two restroom locations used by Student A were set at a lower height and a toilet with a bidet was also installed as an accommodation for the bathroom environment. Also, a sliding door was installed by the toilet, creating an individual room where Student A could change their clothes if they happened to soil their clothes while using the bathroom. The sink area featured an elongated lever and also a stool to make it more accessible and easier to use.</p> <p>Handrails were set at a lower level for the indoor stairway leading to special classrooms, such as the library, while the handrails were made thinner so that the pain of the hand could grasp them easier.</p>																											
	Costs and source of funds	    	<table border="1"> <thead> <tr> <th>Facility/equipment</th> <th>Cost</th> <th>Source of funds</th> <th>Score</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Inflant urinal</td> <td>104,000yen/2 locations</td> <td>Budget of school establishment</td> <td>5</td> <td>d</td> </tr> <tr> <td>Western style toilet</td> <td>148,000yen</td> <td>Budget of school establishment</td> <td>5</td> <td>d</td> </tr> <tr> <td>Faucet lever</td> <td>25,000yen</td> <td>Budget of school establishment</td> <td>5</td> <td>d</td> </tr> <tr> <td>Stool</td> <td>15,000yen</td> <td>Budget of school establishment</td> <td>5</td> <td>d</td> </tr> </tbody> </table>	Facility/equipment	Cost	Source of funds	Score	Quantity	Inflant urinal	104,000yen/2 locations	Budget of school establishment	5	d	Western style toilet	148,000yen	Budget of school establishment	5	d	Faucet lever	25,000yen	Budget of school establishment	5	d	Stool	15,000yen	Budget of school establishment	5	d	<p>Details about facilities/equipment installed based on the condition of pupils/students with disabilities</p> <p>Costs and source of funds</p>
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Examples of creative solutions not involving facility installation	<p>Injury-prevention covers were installed by teachers to protect against falls or collisions.</p> 	<p>Creative solutions excluding facility installation</p>																											

The full version of this report and the database can be accessed from the website of the National Institute for Educational Policy Research (NIER). (http://www.nier.go.jp/04_kenkyu_annai/div11-shisetsu.html)