

# A Collection of Exemplary Design of Kindergarten Facilities

Based on the Revision of Guidelines for Designing Kindergarten Facilities

June 2010



The background of the page is a collage of various scenes from a kindergarten. It includes children playing in a large outdoor area with colorful structures, children sitting at tables in a classroom, and children engaged in activities in a playroom. The images are faded and serve as a backdrop for the text.

## INTRODUCTION

In February 2010, The Ministry of Education, Culture, Sports, Science and Technology (MEXT) revised the Guidelines for Designing Kindergarten Facilities to keep pace with social changes and to respond to the revision of the Course of Study for Kindergartens which was publicly announced in March 2008 and was put into effect in fiscal 2009.

For the purpose of preparing a booklet which collects case examples for giving clear explanations of the revised Guidelines for Designing Kindergarten Facilities, the Committee for Study of Case Examples in Response to the Revisions to the Guidelines for Designing Kindergarten/Elementary School/Junior High School Facilities was established in December 2009 at the request of MEXT.

The Committee selected five kindergartens for conducting onsite investigations and collecting information. Important perspectives employed in the revision of the Guidelines had already been put into practice by these kindergartens.

This booklet provides descriptions of kindergarten facilities. With the view to attracting greater attention to kindergarten facilities from those involved with operation of kindergartens, including kindergarten personnel and kindergarteners' parents, photos and diagrams are also shown together with comments from kindergarten principals and teachers.

It is sincerely hoped that this booklet will be used nationwide for improving the educational environment on the basis of specific conditions at each kindergarten as well as on local circumstances.

Satoru Nagasawa  
Chair






Committee for Study of Case Examples in Response to the Revisions to the Guidelines for Designing Kindergarten/Elementary School/ Junior High School Facilities

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# Revision of the *Guidelines for Designing Kindergarten Facilities*

## Background

From in April 2009, the revised *Course of Study for Kindergartens* has been implemented with an aim of helping children to develop their “zest for living.”

Education provided to children in their early childhood is critical for building the foundation for lifelong character formation. In the environment carefully designed for kindergarten education, children should be encouraged to have various experiences while spending time chiefly by playing. Teaching at kindergarten should be comprehensive and yet be tailored to children’s individual needs. These basic ideas were further developed in the revised *Course of Study for Kindergartens*.

To keep pace with the revision to the *Course of Study for Kindergartens* and also in view of the social changes as well as environmental issues including global warming, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) started review of the *Guidelines for Designing Kindergarten Facilities* in June 2009. The *Guidelines* were revised in February 2010.

## *Guidelines for Designing Educational Facilities*

*Guidelines for Designing Educational Facilities* provide points to consider in planning and designing school facilities that ensure functions inevitable for facilitating school education.

## Outline of the Revision

### ■ In response to the revision of the *Course of Study for Kindergartens*

#### Designing environments for diverse life experiences

- Designing all the kindergarten facilities by positively and effectively laying out green areas
- Designing kindergarten buildings and gardens so that they are enjoyable for children in many ways, encouraging children to engage in a variety of activities while playing

#### Improving facilities such that they strengthen the ties between schools, families and regions

- Designing kindergarten facilities by improving their function and role as a local preschool education center
- Designing kindergarten facilities as a place of daycare giving consideration to children who stay for extended hours

#### Aiming for smooth transition from kindergarten education to elementary education

- Designing kindergarten facilities by taking into account the exchanges with pupils from elementary schools in the neighborhood

### ■ In response to the changes in social circumstances

#### Facilities for helping to develop children’s physical strength

- Designing kindergarten gardens and laying out play equipment by taking into account the continuity and uninterrupted movement from the inside to the outside of the kindergarten building and vice versa

#### Making spaces for child fitness improvement

- Designing kindergarten facilities so that information equipment can be installed when computerization of school affairs is required and/or when such equipment is necessary for broadening children’s horizons

#### Considering promotion of special needs education

- Designing kindergarten facilities to allow certain flexibility and latitude in choosing diverse activities for children with special needs according to their individual disabilities

#### Considering sustainability in terms of the environment

- Designing kindergarten facilities to be built in an environmentally friendly way and with consideration for reduction in the environmental effects, so that the facilities can be used as practical teaching resources

# A collection of exemplary design for kindergarten facilities in five planned kindergartens

	Yotsukaido Satsuki Kindergarten	Fuji Kindergarten	Hachiman Kindergarten, Gujo City	Takachiho Kindergarten	Nakajima Kindergarten, Nakajima Village
Page number	3	7	11	15	19
Designing environments for diverse life experiences	●		●	●	●
Improving facilities such that they strengthen the ties between schools, families and regions	●	●	●		●
Aiming for smooth transition from kindergarten education to elementary education			●		
Making spaces for child fitness improvement	●	●		●	
Considering promotion of special needs education				●	
Considering sustainability in terms of the environment		●			●

## 【How to use the case reports】

Basic data on the kindergarten (e.g.: the scale of the facilities and the numbers of children)

Educational policy

Figures and photos to briefly explain key points of the plan that were taken from the revised guidelines for facilities at the kindergarten



Key points of the plan that were taken from the revised guidelines for facilities at the kindergarten

Opinions by the principal, the architects and committees about the facilities



# 1

Yotsukaido City, Chiba Prefecture

## Yotsukaido Satsuki Kindergarten

■ No. of classes\*: 6

■ No. of children\*: 131

■ Owner: School Corporation Shimoshizu Gakuen

■ Location: 2531-9 Shimoshizushinden, Yotsukaido

■ Site area: 5,547.20 m<sup>2</sup>

■ Building area: 1,484.25 m<sup>2</sup>

■ Total floor area: 1,417.78 m<sup>2</sup>

■ Structure and scale: Wood and steel construction. One floor above ground

■ Construction period: July 2006 – Feb. 2007

\*Numbers of classes and children are as of the end of Mar. 2010.

Educational Policies: Fostering children who...

- are healthy and happy
- appreciate nature and beauty
- can learn and think independently
- have a sense of independence and self-control
- care about others

Since children now spend less time playing outside, our goal is to provide them with opportunities to be outside, to interact directly with nature and to gain a feel for living with nature.

Every day is like a school trip day. At this kindergarten, children can enjoy nature and develop their physical strength.

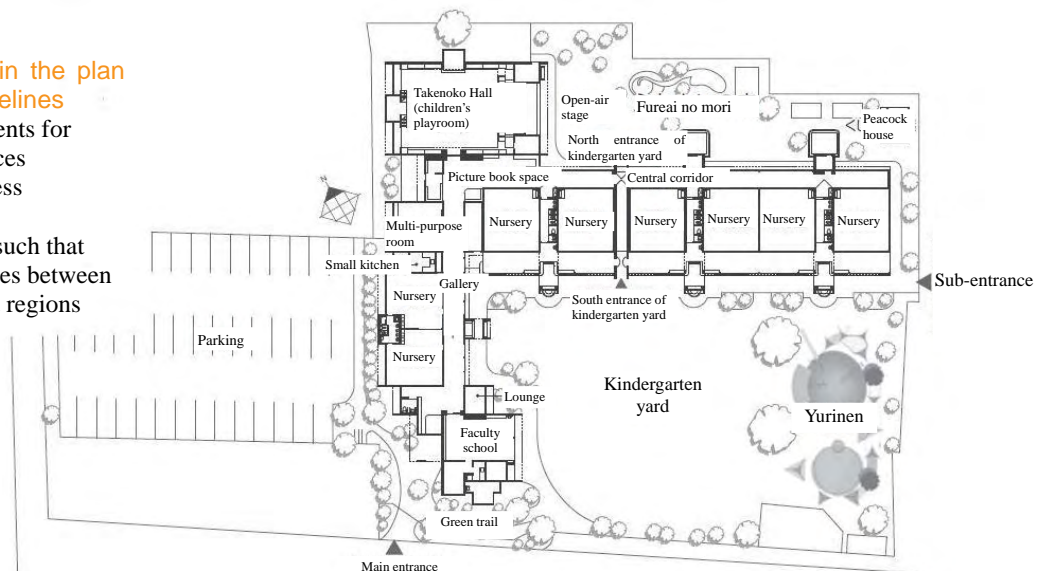
We aim to provide opportunities for “lingering on the grass, making observations at the pond, and growing fruits and vegetables,” “enabling children to enjoy nature in varied environments,” “holding recitals and concerts at open-air stages,” “running around a sandbox, on a hill, and from the kindergarten building to the yard,” and “enjoying facilities and environments that enable children to cultivate their sensitivity and learn about themselves.”



The main entrance to the kindergarten building, which is surrounded by greenery

Key points adopted in the plan from the revised guidelines

1. Designing environments for diverse life experiences
2. Spaces for child fitness improvement
3. Improving facilities such that they strengthen the ties between schools, families and regions



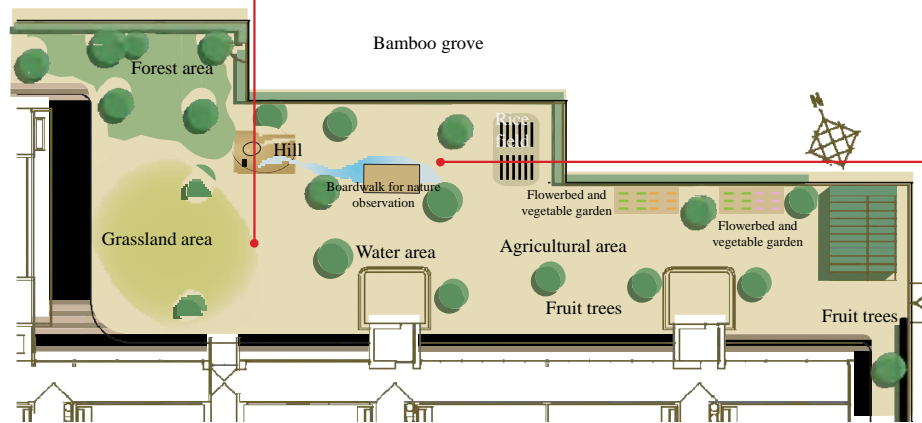
■ Layout and 1<sup>st</sup>-floor plan



1. A kindergarten yard with a wild bamboo grove.



2. Children interact with nature at the biotope observation deck.



3. Fureai-no-Mori woods, located to the north of the nurseries



4. Takenoko Hall and the open-air stage are used for concerts, recitals and exchanges with the community.



5. Children play at Yurinen, on the south side of the kindergarten building

### Principal's Opinion

#### Experiencing natural beauty at Fureai no Mori

We have developed Fureai-no-Mori woods to enable children to better enjoy nature. It consists of a) a forest area of fruit trees, b) a grassland area with grasshoppers, c) a water area with killifish and d) an agricultural area with a rice field, a flowerbed and a vegetable garden. Eating harvested crops and seeing and touching small living things, children feel the joy of living and they nurture their ability to live. (Photos 1, 2; Figure 3)

#### Takenoko Hall, available to families and others in the local community

The stage in Takenoko Hall, located on the north side of the kindergarten building, is used as an outdoor and indoor stage. It's a place for people to enjoy community exchanges, such as those of inviting local community members to recitals. It's fortunate that parents and guardians help to take care of the kindergarten yard. They enjoy their meetings, eagerly discussing what to do next for the kindergarten. (Figure 4)

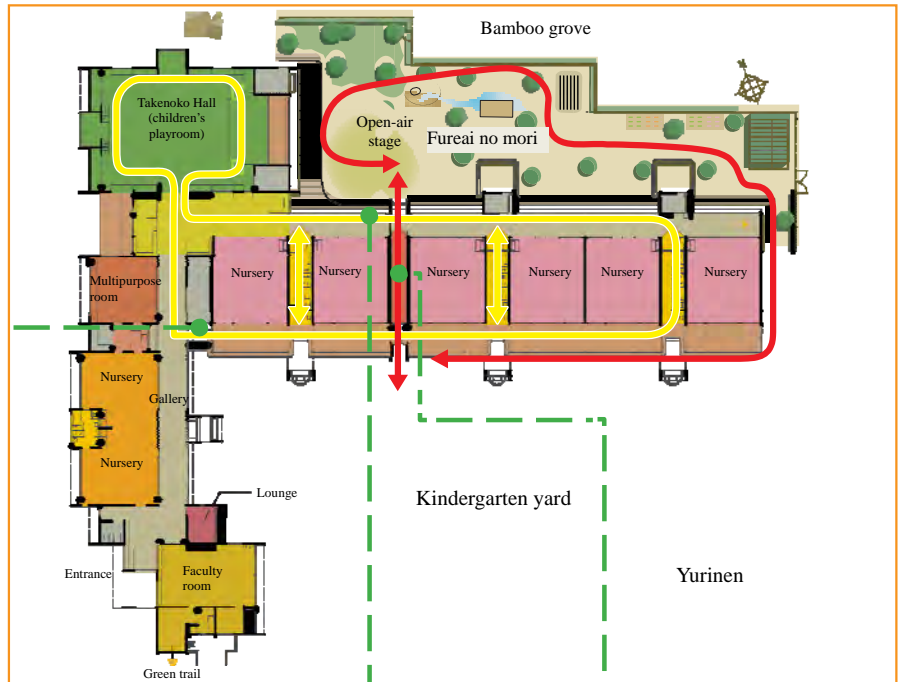
#### Yurinen, which enriches the play environment for children

To capture children's interest, Yurinen has a small hill, nets, ropes, tents, mirrors, lenses, bells, triangle-roofed houses and sandboxes. Children can easily go straight to wherever they want, because Yurinen is built at the end of the large playground that faces the kindergarten building. By playing at Yurinen, children can develop their creativity and improve their strength. (Photo 5)





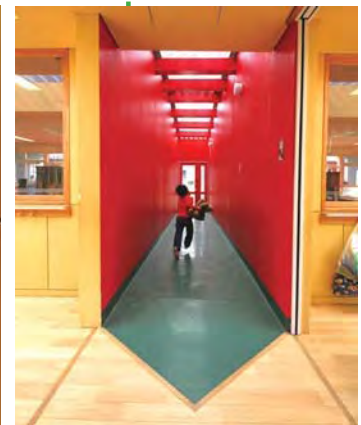
6. A semi-outdoor space, the connection between a gallery and a wooden deck



7. Flow diagram (circulating flow)



8. The bright central corridor with big overhead lights offers easy access to other places.



9. The short cut between the yard and Fureai no Mori offers easy access to other places. Children can walk on the green floor with their shoes on.

Access to anywhere encourages children to move actively.

Nurseries are surrounded on all four sides by hallways, so that children enjoy running through the whole building, even on rainy days. Fureai no Mori, on the north side of the building, and the kindergarten yard and Yurinen, on the south side of the building, are connected by indoor hallways through which children can pass from the central building with their shoes on. The indoor building has continuous spaces that easily access the yard, providing excellent circular flow. Children run around in the spaces and develop friendships with those of different ages. (the yellow area in Figure 7; Photos 6, 8, 9)

Facilities that consider child support

Each bench on the kindergarten grounds is a good place for parents and guardians to relax together. A crib for diaper-changing is installed in the restroom, as parents are expected to bring pre-kindergarten children. An inviting lounge is used for childcare counseling. Thus, our kindergarten provides not only children but also parents with fun, comfortable places. (Photos 10 - 13)

< Architect's Opinion >

◎ For exterior finishing, we used materials that are durable and weather-resistant. In the interior, wood is generously used to make the rooms look warm and welcoming. Fall accidents are the most common causes of injuries among children. Floor joists and solid oak moderate the damage from falling. (Photo 8)

◎ In space planning, top priority is given to teacher-children relationships. As a result, the faculty room is located where teachers can closely interact with children. (Figure 7)





10. Children and parents enjoy talking while sitting on benches in the kindergarten yard.



11. Benches near main entrance are used for interactions between parents and staff when parents pick up and drop off their children.



12. Restroom with a crib for diaper changing



13. A comfortable lounge

### Committee's Opinion

©In addition to building new rooms, six existing nurseries were aseismically retrofitted, based on a request from the kindergarten to keep some of the existing rooms. We extended the eaves of the reinforced steel frames and made a wooden deck that can serve as a play area. The central corridor connects to the new buildings, offering easy access. (Figure 7)

Design: Environment Design Institute

**From the perspective of designing environments for diverse life experiences**

The kindergarten secures places for children to have life experience: on the south side of the building, a clay ground and a yard with playground equipment; on the north side of the building, Fureai no Mori, a place to enjoy nature at a biotope and the like.

**From the perspective of spaces for child fitness improvement**

The building secures access to the outside. Additionally, connections to shortcuts and semi-outdoor spaces encourage children to run freely. Inside the building, each room is effectively surrounded on all sides by hallways so that children can easily go anywhere they want, even on rainy days.



# 2

## Tachikawa City, Metropolitan Tokyo Fuji Kindergarten

■ No. of classes\*:19  
 ■ No. of children\*:620  
 ■ Owner: School Corporation  
 Minnanohiroba Fuji Kindergarten  
 ■ Location: 2-7-1 Kamisuna-cho,  
 Tachikawa City, Metropolitan Tokyo

■ Site area: 4791.69 m<sup>2</sup>  
 ■ Building area: 1419.25 m<sup>2</sup>  
 ■ Total floor area: 1304.01 m<sup>2</sup>  
 ■ Structure and scale: Steel construction. One floor above ground  
 ■ Construction period: Mar. – Sep. 2006 (Phase I), July 2006 – Jan. 2007 (Phase II)  
 \*Numbers of classes and children are as of the end of March 2010. All the other information is for the new building, which was completed in 2007.

### Educational Policies

- Teaching children that everyone is different and everyone is correct
  - Helping children to become independent
  - “Surprise” is the mother of “understanding”
- People, kindergarten buildings, horses, trees and grass are all necessary for children to grow, because they make children feel and think, and then take action on their own.

## An oval kindergarten that resembles a doughnut and whose roof is a playground where children can run around

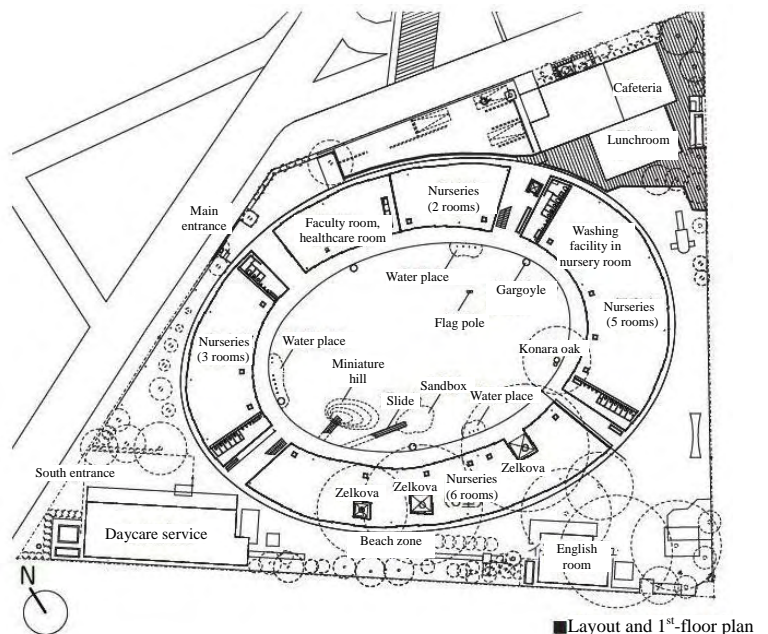
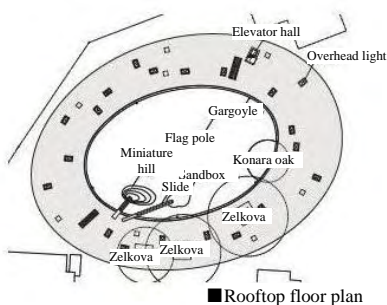
The kindergarten building was built based on the concept that “a kindergarten building is a huge playground for children’s growth, a tool for fostering children.” That there are horizontal and vertical directions of flow for children between the courtyard and the rooftop helps children to build their strength. Open spaces like the lunchroom and the cafeteria can be used for child-raising support, thereby encouraging interaction with the local community.



On rainy days, rainwater falls in a cascade from the roof to the round basin, thrilling the children.

### Key points adopted in the plan from the revised guidelines

1. Spaces for child fitness improvement
2. Improving facilities such that they strengthen the ties between schools, families and regions
3. Considering sustainability in terms of the environment







1. Children freely run around on the rooftop.



2. Tree climbing, and a hammock to play in



3. Children move around a semi-outdoor terrace that connects to the kindergarten building.



4. Children enjoy a slide that connects the courtyard and the rooftop.

## Principal's Opinion

### Running around and making their own choices

The distinguishing feature of our kindergarten is how it allows children to run freely in the building. A survey has revealed that the children in our kindergarten take many more steps than the children who are in a kindergarten that incorporates soccer into its daily curriculum. A wide-looped rooftop enables children to move frequently. Children love running around the facilities, which have no ends but are circularly routed. We've created an environment that allows children to play all around the building, with playground equipment made of natural trees and a slide that connects the roof and the yard.

At the playground there are zelkova trees to climb, a large sandbox and other elements for play. Children look around the whole kindergarten from the rooftop and then decide where to play, which fosters their ability to make their own choices. (Photos 1 - 4)

### Space for activities in the whole kindergarten

On the 1<sup>st</sup> floor there's a space that's partly covered by a roof. It's used as a place to play on rainy days and as a place for children to interact with those in other classes. Teachers can monitor the whole area. The lack of partitions keeps children from being isolated. (Photo 3)

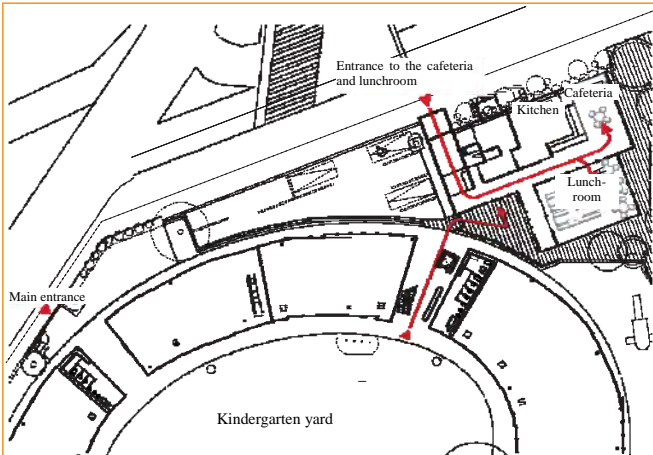
### Space for child-raising support

We offer the lunchroom and cafeteria as places for child-raising support. Visitors can enter these facilities without passing through the kindergarten building. They can easily see inside the facilities and then enter without hesitation. At these facilities parents can share their experiences about issues associated with raising children and build a local network of child-raising through communication. These facilities are appreciated by parents and guardians.



Improving facilities such that they strengthen the ties between schools, families and regions

↳An environment that enables parents to watch over their children with ease



5. The cafeteria and lunchroom, which are open to parents and guardians, can be accessed from a separate entrance.



7. A cafeteria and lunchroom that parents can enter and leave through either the main entrance of the kindergarten or the doorway of the cafeteria and lunchroom.



6. Parents talk in the lunchroom.



8. Parents relax in the cafeteria.

### Support for communication between parents and children

In the lunchroom, parents and children have lunch together regularly to enjoy communication. We'll be happy if the children one day look back and remember enjoying lunch with their parents at our kindergarten, instead of at a restaurant. (Photo 6)

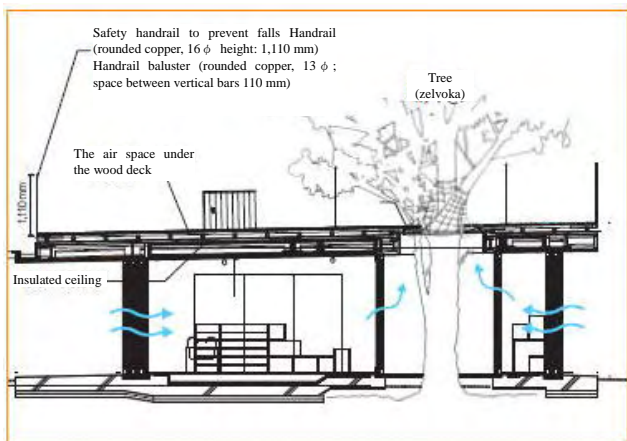
### A comfortable environment with insulating materials and well-ventilated spaces

It's possible to open or close all the sliding doors of the courtyard and the building, according to the season. Even in summer, there's little need for air conditioning. The rooms just below the roof tend to get hot in summer, but heat insulation secures comfortable spaces. Children can open and close the sliding door easily and safely, with little exertion. The trunks of trees pass through holes in the kindergarten building, through which wind can pass and at which children can feel at one with nature. (Figure 9; Photos 10, 11)

### < Architect's Opinion >

◎ Basically there are no partitions in the nurseries. We discussed whether partitions were needed between nurseries, but instead of partitions, we decided to use stackable boxes that double as furniture. Now the boxes are used as lockers, bookshelves and toolboxes. Since the boxes are movable, it's possible to make a large space and a stage by stacking the boxes. (Photo 10)

◎ We've made it possible for children to run on the rooftop of this oval kindergarten, so that they can improve their athletic ability.



9. The air space under the wood deck and the insulated ceiling moderate the rise in room temperature in summer. The rooms are designed with natural ventilation.



11. The kindergarten building accommodates a tree that was originally on the site.



10. Classroom when the large windows are open

A slide connects the play area on top of the building to the play area in the yard, making it easy for children to move between levels. (Photos 1, 4)

©The premises already had woods, and these have been left standing so that children can enjoy nature. Insulating materials and air layers at the roof slab moderate rises in room temperature. With all the sliding doors open, the rooms are well ventilated, affording a comfortable indoor environment even in summer. (Photos 1 - 4, 10, 11; Figure 9)

Design: Tezuka Architects

### Committee's Opinion

From the perspective of child fitness improvement.

This kindergarten has accessible places to capture children's interest in outdoor activities and play and for them to move freely, encouraging children's physical development. The large space under the eaves gives children the opportunity to see what other children are doing.

From the perspective of improving facilities such that they strengthen the ties between schools, families and regions.

There is a place available for counseling and child-raising group activities of parents, and of parents and teachers. Stylish interiors and good visibility make parents enthusiastic about coming here.



# 3

Gujo City, Gifu Prefecture

## Hachiman Kindergarten, Gujo City

- No. of classes\*: 3
- No. of children\*: 80
- Owner: Gujo City
- Location: 8-5-1, Ono, Hachiman-cho, Gujo
- Site area: 3,704.96 m<sup>2</sup>
- Building area: 1,171.16 m<sup>2</sup>
- Total floor area: 958.44 m<sup>2</sup>
- Structure and scale: Steel construction. One floor above ground.
- Construction period: June 2005 – Apr. 2006
- \*Numbers of classes and children are as of the end of March 2010.

### Educational Policies

- Fostering cheerful children
- Developing good living habits
- Cultivating children's sensitivity

Our goal is to encourage children to learn good living habits and group life by having fun interacting with those of different ages.

### Multi-age interactions and diverse experiences foster child growth.

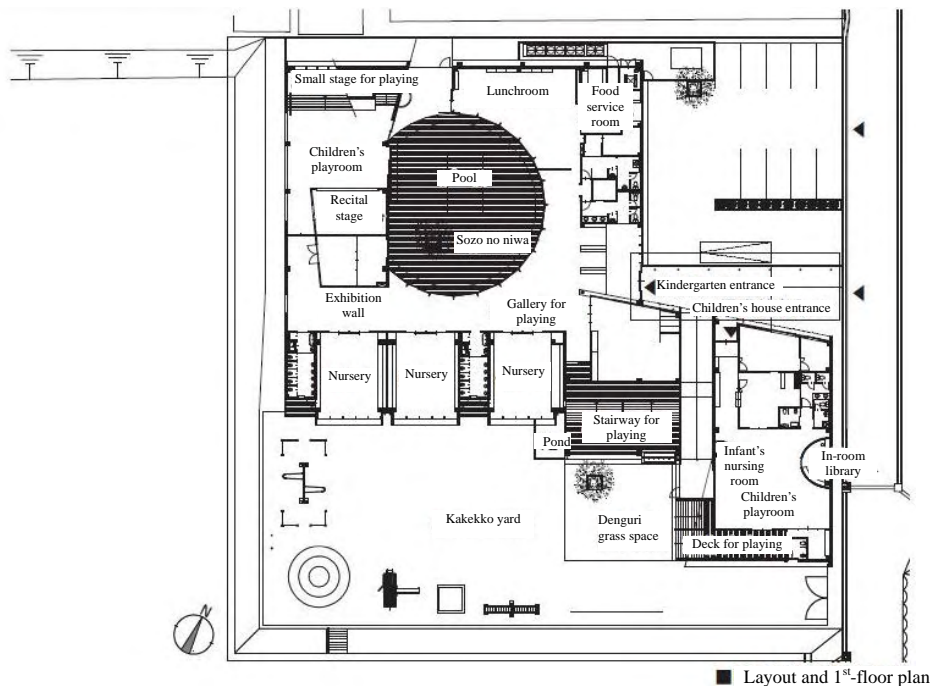
Facilities are designed to emphasize living with nature and collaboration with the local community, and to provide experiences of growing and eating vegetables. Playrooms facilitate various play activities.



The wooden floors and walls, the gallery and the courtyard are designed in consideration of children's play and interaction with the local community.

### Key points adopted in the plan from the revised guidelines

1. Designing environments for diverse life experiences
2. Aiming for smooth transition from kindergarten education to elementary education
3. Improving facilities such that they strengthen the ties between schools, families and regions



■ Layout and 1<sup>st</sup>-floor plan





1. In the lunchroom, children wait their turn to be seated at lunch.



2. The food service room next to the lunchroom



3. Children cook vegetables from the vegetable garden.



4. Gathering the harvest from the vegetable garden

### Principal's Opinion

#### An inviting lunchroom finished in wood

For instilling good living habits in children, lunchtime is important. The lunchroom, finished in natural wood from Gifu Prefecture, has a warm, inviting atmosphere. Children learn group rules and about caring for others by acting in a group. Also, luncheons and dinners are held by parents in the lunchroom, which is used as a place for interaction among parents. (Photo 1)

#### Cooking experience

In the lunchroom, children have fun learning how to use cooking equipment, cutting vegetables in any shape they like and soaking them in water. After they finish cooking, they enjoy eating the food they've made. The food service room is situated next to lunchroom, where children learn the fun of cooking as well as learning that cooking requires lots of work. (Photo 2, 3)

#### Harvest festival

Most children love playing in the dirt, but growing vegetables is another story. So some children in the vegetable growing group of the food distribution course at Gujo High School come to the kindergarten to help children work the vegetable garden. Efforts have been made to enable children to harvest vegetables easily and to enjoy growing them. (Photo 4)

Aiming for smooth transition from kindergarten education to elementary education  
 ↳Interaction in nurseries that combine with a gallery for play



5. In nurseries that combine with a gallery for play, children play with elementary schoolchildren who have visited the kindergarten.



6. It is possible to see into the nurseries from the gallery for play.



7. Children enjoy looking at the kindergarten yard from the big windows of nurseries.

#### Learning, playing and interacting: Diverse experiences with elementary schoolchildren

Through diverse experiences with elementary school students, kindergarten children learn many things, becoming nervous at times, discovering new things and so on. By opening the big sliding doors, nurseries convert into a larger place for interactions with elementary school students. In this larger space, children see elementary schoolchildren's performances, which motivate them to do their best in work and performance. In the children's playground, elementary schoolchildren with great sensitivity help younger children to nurture their creativity. (Photos 5 - 7)

#### The first step toward performing on stage in the children's playground

The children's playground has two stages: one for practicing, and the other for performing. The stage for practicing can be used as seating for events. Lighting equipment, sound equipment and a curtain are all installed at the stage for performing. These two stages contribute to the expansion of children's activities and diverse experiences. (Photos 8 - 11)

#### < Architect's Opinion >

◎For an interior that conveys a natural feeling, we finished the interior in wood and we installed large glass windows that let in sunlight. By opening the large windows, the kindergarten building and its courtyard can be combined to become a playground. (Photo 6, 7)

◎We improved the cooking facilities, toward facilitating luncheons and dinners held by parents and the use of vegetables from the garden. The facilities enable hands-on activities of cooking, eating and farming. (Photo 1 - 4)



A facility layout that strengthens ties between the kindergarten, parents and the community

↳ The stage and the audience seats are a venue for “special experiences” for children and their parents



8. The playroom offers various experiences. The stairs of the “practice stage” can be used as audience seating.



9. “The practice stage” in the playroom



10. Children dance with the teacher.



11. “The recital stage” is for recital day. All the children enjoy themselves.

©We installed two stages for practice and recitals, in different places. On these stages, children can learn many things, understanding the importance of getting attention from others, group action and role playing, and fostering a sense of values. (Photo 8 - 11)

Design: Kanazawa Planning Institute

### Committee's Opinion

From the perspective of designing environments for diverse life experiences

The kindergarten offers children rich experiences related to food, providing a place to eat and giving children opportunities to cook and eat the vegetables they've harvested from the vegetable garden.

From the perspective of aiming for a smooth transition from kindergarten education to elementary education

Nurseries are designed to combine with galleries for playing. When children from neighboring elementary schools come to the kindergarten, the faculty and staff remove the partitions between nurseries and the gallery to make a larger space. In this way, nurseries can be flexibly used for multipurpose activities.



# 4

## Suginami Ward, Metropolitan Tokyo Takachiho Kindergarten

- No. of classes\*: 9
  - No. of children\*: 223
  - Owner: School Corporation Takachiho Gakuen
  - Location: 2-19-1, Omiya, Suginami Ward
  - Site area: 3,473.18 m<sup>2</sup>
  - Building area: 1,351.86 m<sup>2</sup>
  - Total floor area: 1,849.47 m<sup>2</sup>
  - Structure and scale: RC construction. Two floors above ground.
  - Construction period: July 2008 – Apr. 2009
- \*Number of classes and children are as of the end of Mar. 2010.

Educational Policies: Fostering children who...

- are cheerful and considerate
- have a clear notion of right and wrong
- are optimistic, whatever happens
- see and listen carefully, and are thoughtful

We aim to provide children with experiences to enjoy nature and to interact with friends in an environment where faculty, staff and parents can keep an eye on the children.

### Galleries for playing freely, and large open spaces in the kindergarten building and yards.

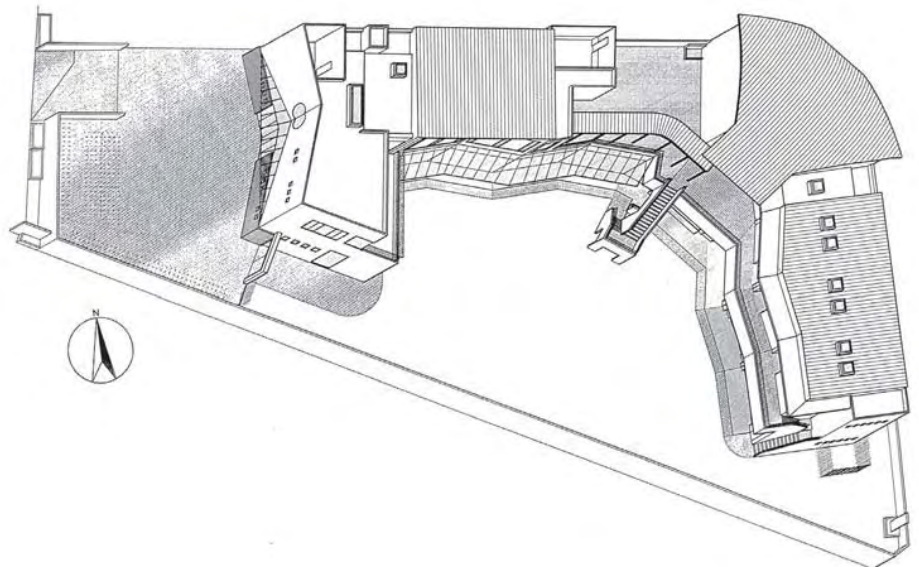
Nurseries for each grade are linked to each other. The corridors allow children to move freely among the nurseries. Tiny hidden rooms are found between nurseries. The kindergarten building and the yard can instantly convert into a large playing space that has no level differences, and the building and the yard are used according to the interests of the children. The facility blends with the existing woods, serving as a stage where children are the heroes.



Surrounded by greenery and with limited access to the outside, the kindergarten is safe and secure.

#### Key points adopted in the plan from the revised guidelines

1. Designing environments for diverse life experiences
2. Space for child fitness improvement
3. Considering promotion of special needs education





1. A nursery (for older children) has elevated areas that can be used as stages.



2. Children (younger children) assemble onstage.



3. A library space on the carpeted floor at a level lower than the hallway



4. Washbasins, and lockers and hallways on the north side of the nursery

### Principal's Opinion

#### Small but creative attempts to showcase children's efforts

Nurseries have elevated areas. These are used as a children's playground and a stage for recitals and singing practice. The large windows in the nurseries enable children to look out on the kindergarten yard, increasing children's interest in outdoor play. (Photos 1, 2)

#### Designing facilities that meet children's interests

To foster children's free thinking, the library is situated between the yard and the nursery under the staircase at the center of the building. We wanted to design an environment where any book could be read any time. Situated on the carpeted floor at a level lower than the hallway, the library is a comfortable place surrounded by bookshelves. (Photo 3)

#### Spaces for playing, looking at art and hand-washing

In the interest of hygiene, washbasins with towel hangers are installed between the two nurseries. After the children wash their hands, they dry them on the towels for proper hygiene. The outside walls of the nurseries are used for exhibiting children's work. Our kindergarten is designed to support diverse activities. (Photo 4)



Space for child fitness improvement  
 ↳Combining a playground and a bright, glass-roofed terrace



5. A bright, glass-roofed terrace. It is accessible to hallways of the nurseries.



6. Children use the connection between facilities (nursery – hallway – terrace – yard) as a play area.



7. Two rooms become one when the sliding doors are opened.

**Nurseries, hallways and terraces combine to form a large playground.**

Since nurseries, hallways and terraces are designed to be at the same floor level, they convert into one large playground when the doors are opened. Another hallway across from the nurseries connects them to the inside of the whole kindergarten building, enabling children to move freely among the nurseries. The accessibility of these spaces encourages children to enjoy activities such as eating lunch and playing freely, helping children to improve their physical strength. (Photos 5 - 7)

**“Den” for special needs education**

There is a small room called “Den” between nurseries. It is a secret chamber for children and a particularly good place for panicked special-needs children who need to calm themselves. Den, usually used as a hideout or as a place for playing house, is the children’s favorite place. (Photos 8 - 10)

**< Architect’s Opinion >**

◎ The site abounded in zelkovas, ginkgoes, firs and other trees. In designing the kindergarten facility to consider harmony with nature, we have created spaces that enable children to enjoy nature and appreciate the seasons. (Photo 6)

◎A nursery connected to another nursery can be used for diverse childcare services, such as extended-hours daycare. (Photo 7)





8. Nursery with Den



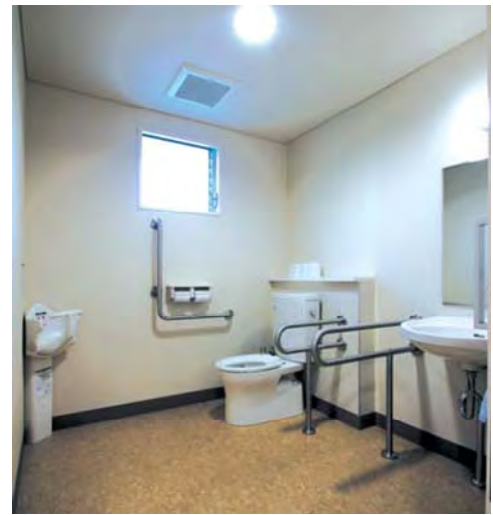
10. Den can be used as a place for panicked children to calm themselves.



9. Den, connected to the nursery, as seen from the hallway



11. The entire kindergarten building has the same level of floor, and an elevator is installed ("barrier-free").



12. A restroom for those with impaired mobility; a crib for changing diapers

### Committee's Opinion

◎ Twisty hallways that face the yard stimulate children's expectation and curiosity, increasing the range of opportunities for playing and moving around. (Photo 3)

◎ For persons with disabilities, the elderly and persons using baby strollers, we installed an elevator and barrier-free facilities. Furthermore, floor heating is introduced to make the spaces comfortable. (Photos 11, 12)

From the perspective of making spaces for child fitness improvement

A sunny semi-outdoor space connected to nurseries is actively used to encourage children to take initiative. Connecting the inside and outside the kindergarten is an effective way of having children take more interest in the outdoors.

From the perspective of considering promotion of special needs education

Den, situated next to nurseries, can be used to help children with emotional disorders, autism or ADHD to recover from panic. Additionally, a toilet seat and handrails for people with disabilities are installed in the restroom. The kindergarten is designed to enable children with disabilities, those without disabilities, and faculty and staff to enjoy their kindergarten life.



# 5

## Nakajima Village, Nishi Shirakawa Gun, Fukushima Prefecture Nakajima Kindergarten, Nakajima Village

- No. of classes\*: 7 (including 1 with extended daycare)
- No. of children\*: 147
- Owner: The village of Nakajima
- Location: 28-2, Azafutatsuyama, Oazanametsu, Nakajima, Nishishirakawa-gun
- Site area: 5,121 m<sup>2</sup>
- Building area: 1,739.29 m<sup>2</sup>
- Total floor area: 1,469.84 m<sup>2</sup>
- Structure and scale: Wood construction. One floor above ground
- Construction period: June 2004 – Feb. 2005
- \*Numbers of classes and children are as of the end of Mar. 2010.

### Educational Policies:

Fostering children who...

- can get along with their friends
- can take care of themselves
- are healthy, cheerful and strong

We've aimed to design an environment that cultivates a "zest for living" through various activities for playing and learning, and to provide children with the opportunity to enjoy playing anywhere in the kindergarten.

### Comfortable wood spaces for diverse activities

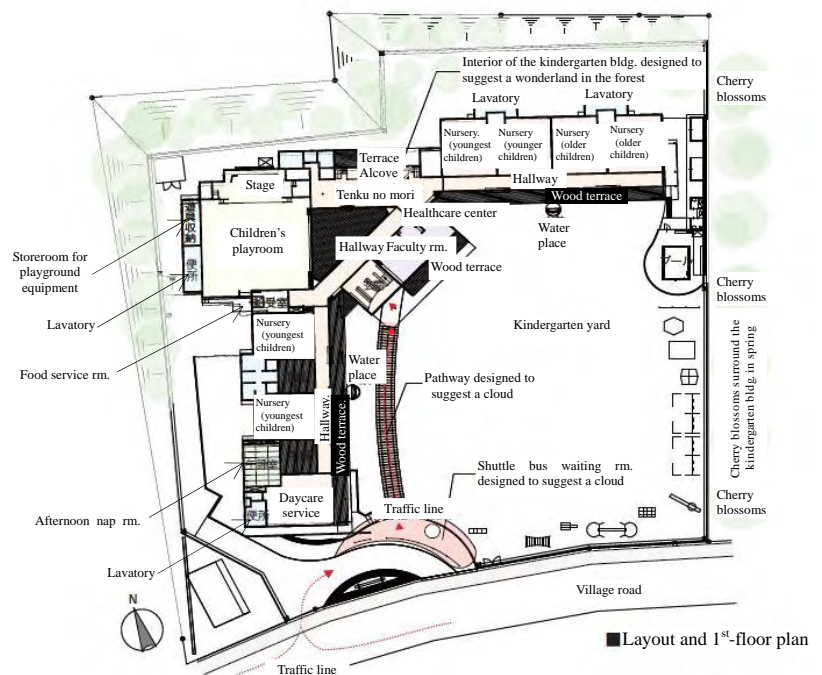
Indoor spaces, generously finished with wood, bring the comfort of nature. Indoor rock climbing is possible. The indoor facilities have many features that are aimed at fostering children who have a "zest for living" and that address the need for extended daycare.



The kindergarten building, surrounded by greenery, and its main approach

### Points requiring revision in the planning guideline

1. Designing environments for diverse life experiences
2. Improving facilities such that they strengthen the ties between schools, families and regions
3. Considering sustainability in terms of the environment





1. The inside of the kindergarten building, warmly appointed with wood



2. Spaces to play and read



3. Windows for observation stimulate children's interest.



4. Older children play in the courtyard.

### Principal's Opinion

Children have fun playing in indoor spaces in winter.

In this region of Fukushima Prefecture, the cold winters prevent children from playing outside freely. To improve children's physical strength, we provide diverse activities in indoor spaces. A courtyard under the deep eaves is designed so that they can run freely. Facilities for rock climbing and tree climbing help children to develop arm and leg strength and a sense of balance. (Photos 1, 2, 4)

Children read books and talk with their friends, which helps them broaden their world.

Picture Book Plaza, warmly appointed with wood, is a space for children to cultivate their imagination by reading picture books. With space for reading anytime, children have fun reading books with friends and broadening their world. The location, near the places for intellectual and physical education, helps expand children's interest. (Photo 2)

The variety of spaces stimulates children's curiosity and imagination.

Diagonal braces in the hallways and nurseries convey to the children a fun, mysterious rhythm. Children look with great interest out the small observation windows on the wall. These diverse spaces stimulate children's sensitivity and curiosity, and expand their imagination. (Photo 1, 3)



## 5 Nakajima Kindergarten, Nakajima Village

Improving facilities such that they strengthen the ties between schools, families and regions  
↳A space for extended daycare



5. Meeting the needs for extended daycare



6. Afternoon nap



7. Preschoolers play in the yard in front of a nursery, instead of taking an afternoon nap.

### Principal's Opinion

Improving the environment for extended daycare such as by installing afternoon nap rooms

To meet the local community's needs, we put emphasis on improving the environment for extended daycare, such as by installing an afternoon nap room with a tatami floor. Also, to prepare third-term preschoolers for enrollment in elementary school, we take the afternoon nap out of their schedule. Out of consideration for the environment for regular classes and expected daycare needs, our kindergarten has installed carpets and playground equipment in rooms to create a homelike atmosphere.

Four of the 12 faculty and staff are in charge of extended daycare and look after 69 children during the hours of 7:30 a.m. to 8:30 a.m. and 1:30 p.m. to 6 p.m. We're trying to improve childcare support service such that parents can go to work easily. For special needs education, we decide whether to accept children through discussions with specialists and parents. (Photos 5 - 7)

### < Architect's Opinion >

◎ From the waiting space for the shuttle bus to the kindergarten building, a long roofed walkway called Rainbow Bridge keeps out rain and snow and improves children's fitness, raising children's appreciation of the kindergarten. The inside of the building, furnished with wood in consideration of nature, is designed to allow many different activities, such as tree climbing, rock climbing and reading. (photos of the building, Photos 1, 2)

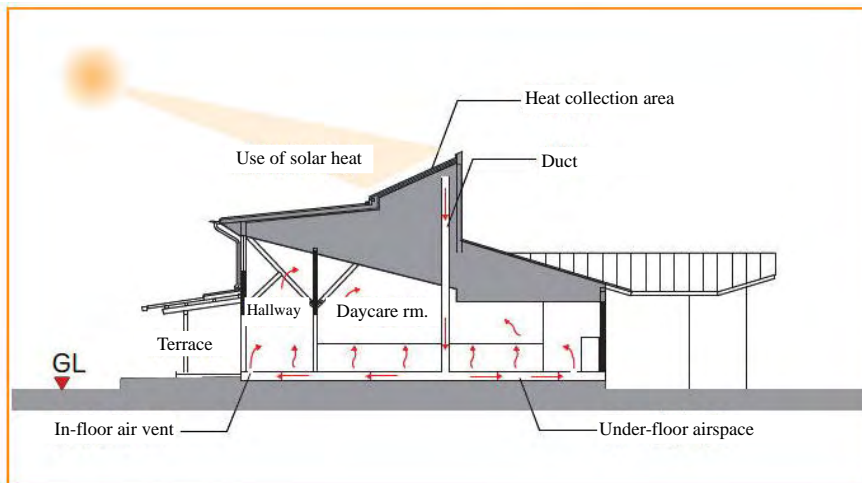
◎ To expand children's interests and curiosity, variously shaped observation windows are installed in the wall of an alcove. The windows are at a height



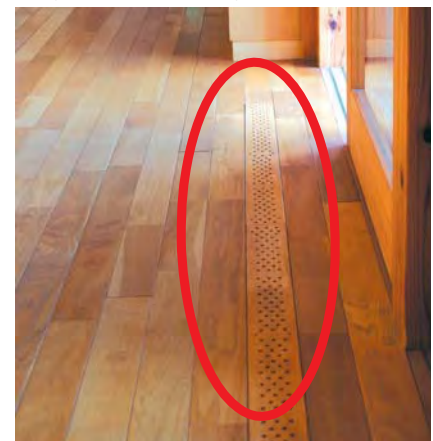
8. Effective use of solar heat and light



9. High windows let in sunlight



10. Mechanism for effective use of solar heat



11. In-floor air vents

suitable for children.

©Eco-friendly energy exchange systems use solar heat and radiation. The heat collector installed on the roof heats air that is sent through ducts to an under-floor chamber for heating. Through high windows of the wooden, single-level building, sunlight falls on the kindergarten building to warm the rooms even in winter, and in summer, with the windows open, pleasant breezes enter and reduce the room temperature. In this way, a comfortable environment is secured in the kindergarten throughout the year. (Photos 8, 9, 11; Figure 10)

Design: Henmi Architect Office

### Committee's Opinion

From the perspective of designing environments for diverse life experiences

The kindergarten has multipurpose spaces to enable children to experience diverse activities, such as looking out observation windows adjusted to the height of children, and rock climbing and tree climbing, which encourage children's physical development.

From the perspective of improving facilities such that they strengthen the ties between schools, families and regions

The facilities are designed to provide extended daycare. Afternoon nap rooms are away from nurseries for older children. Thus, a quiet environment is secured.



# Spaces featuring information technology

## Improvements to expand children's interest

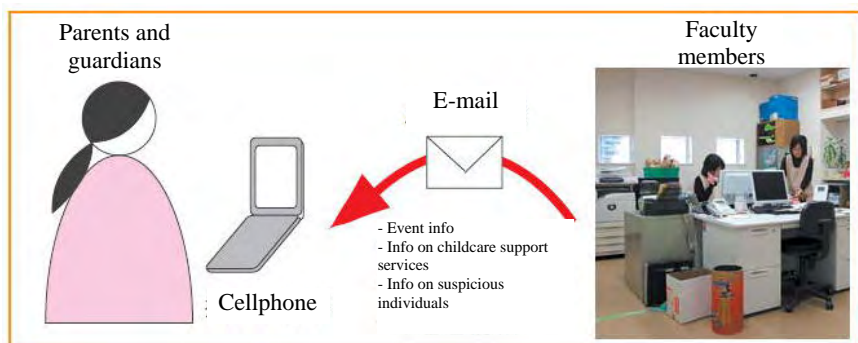


1. Bunkyo Gakuin Fujimino Kindergarten. Images produced by the projector in the hall are used as educational resources.

## Principal's Opinion

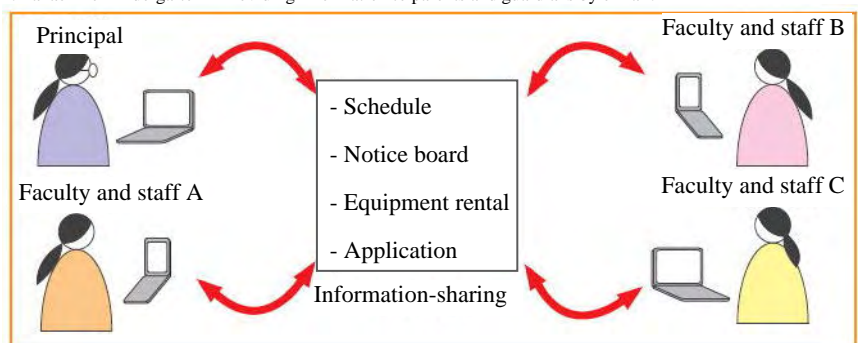
The projector and a screen installed in the hall show images of beautiful overseas scenery, unique animals and the like. Those images are used as educational resources. To prepare for dancing at a sports meet, children practice to the onscreen image of dancing. (Bunkyo Gakuin Fujimino Kindergarten)

## Improvement to promote digitalization of school office work



2. Takachiho Kindergarten Providing information to parents and guardians by e-mail.

We provide an e-mail bulletin for parents and regularly send information on the schedule and details of the kindergarten activities to those who wish to receive them. Many parents like to receive e-mail by cell phone, because it's easier for them to check their e-mail that way than on computer. We also send information on child-raising support regularly, which is popular among parents. (Takachiho Kindergarten)



3. Nakajima Village Nakajima Kindergarten Information-sharing between faculty and staff through groupware

All the faculty and staff use groupware, which makes it possible to manage schedules, notice boards, equipment rentals and the submission of applications online. They can log in on their home computers or cell phones and share information in real time, resulting in increased work efficiency. (Nakajima Kindergarten, Nakajima Village)

### 〈Architect's Opinion〉

#### ●From the perspective of improving the information environment

The hall's audiovisual facilities include a projector, a screen and speakers. LAN access enables data to be transmitted between a server and a computer that is connected to a projector. (Photo 1)

#### ●The acoustic environment

For an acoustic environment that is conducive to fitness activities, performances and the like, the hall is designed with acoustic absorbing materials and set apart from nurseries. (Bunkyo Gakuin Fujimino Kindergarten)





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Committee for Study of Case Examples in Response to the Revisions to the Guidelines for Designing  
Kindergarten/ Elementary School/ Junior High School Facilities