

# How do teachers design and change the environment of classrooms for children under three years old in Japanese ECEC facilities?

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## 1. Introduction

In recent years, the quality of early childhood education and care (ECEC) has been discussed worldwide, with particular emphasis on process quality (OECD, 2023). Process quality is related to the relationship between teachers and children, including interactions and individualized support, and is important for improving the quality of ECEC (OECD, 2023).

The environment of ECEC facilities is another major issue in process quality. The Infant/Toddler Environment Rating Scale (ITERS), a measure of the quality of the ECEC environment is a tool for comprehensively examining the childcare environment for children under three years of age (Harms et al., 2017). It is widely used internationally. However, the quality of ECEC for children under three years of age, varies depending on cultural and other backgrounds. For example, a study on the quality of ECEC using ITERS in Norway revealed that the quality was not very high in certain parts of the country (Bjørnstad et al., 2017). It is likely that some items are commonly emphasized in diverse countries and regions, whereas some content is unique because of each country's situation and background.

In Japan, the utilization rate of ECEC facilities for children under three years is increasing significantly (Children and Families Agency, 2023), and there is an increasing need to consider the childcare environment for children under three years of age. However, it is sometimes difficult to determine how to arrange and change the environment for children under three years old, as many teachers have more experience with children over three years of age.

Therefore, this study aimed to clarify how teachers in Japan who had experience with children aged both under and over three years, their classrooms designs, and changes in the environment of ECEC of children younger than three years. The findings from teachers who practice ECEC in Japan, a country that places high value on the environment, will provide suggestions into environmental design that can be applied to other countries.

## 2. Method

### (1) Data collection

Three ECEC teachers participated in interviews. All of them had over 20 years of experience and had experience with children aged both under and over three years. The interviews were conducted between July and August 2023. Interviews were conducted with the consent of the teachers. The interviews were conducted for approximately one hour each, and the questions were semi-structured.

Interviews were conducted after receiving approval from the Research Ethics Review Committee of Fukuyama City University (approval number: 2023004).

### (2) Data analysis

Data were extracted from the recorded interviews and analyzed using Steps for Coding and Theorization (SCAT), a qualitative data analysis method (Otani, 2019). This helped the understanding of deeper and latent meanings in language records (Otani, 2019). As the purpose of the

Table 1. Analysis procedure

	Teacher A	Teacher B	Teacher C
Analysis words(Japanese)	828	2792	3391
Constructive concepts	15	21	22

study was to clarify ECEC teachers' views, the data obtained from the three interviewees were analyzed. An analysis using the SCAT provided 35 constructive concepts and the storyline formed from the constructive concepts. Table 1 presents a breakdown of the analyses for these three individuals.

### 3. Findings

A portion of the storyline is used to illustrate the results. The compositional concepts are denoted using underlined.

#### (1) Key points of importance in environmental design, regardless of age

Storyline: Regardless of the age of the children, from focus on the 'now' to judgment of environmental need or need based on the children's appearance and comprehensive judgment based on the children's appearance was being made. In addition, the four seasons that teachers have to be aware of as opportunities to change the environment is applicable to all ages.

It became clear that whether the child is under three years old or over three years old, the priority is to focus on the 'now' of the child. Teachers think about what the child in front of them is trying to do right now and what kinds of experiences they want to support. To achieve this, they reconfigured the environment by considering what type of environment was necessary and what type of environment was unnecessary. In addition, an environment in which children are aware of nature and seasons is required.

#### (2) How do teachers design and change the environment for children under three years of age?

Storyline: The design of the environment in the ECEC of children under three years of age was composed and reconfigured from the perspective of guaranteeing experiences that lead to development and avoiding experiences that do not lead to development. To guarantee individualized experiences, understanding the necessary amount of toys and adjusting the environment based on development were made, and making seasonal experiences in the indoor environment was considered. Even in situations where difficulty of verbal persuasion, the teachers reviewed the environment from the perspective of respecting the will of the children as human beings and attending to the children's convictions. With the development of the children, teachers were identifying what is truly necessary.

It became clear that all collaborators would prepare and change the environment based on guarantee experiences that lead to nurturing and avoiding experiences that did not lead to nurturing. Specifically, "If there were two of the same things, that is, two picture books, the teacher would put out the two copies as much as possible. If there were infants, the teachers would leave it out and guarantee their own play rather than have them fight over it" (Teacher B). For children over three years old, it was clear that the environment was changed by discussing children based on understanding of their play movements as a group and discussed identifying what is truly necessary in class. This study reveals a relationship between children's experiences and the increase or decrease of things when teachers consider changes in the environment.

### <References>

- Bjormestad, Elisabeth.& Os, Ellen (2017) Quality in Norwegian childcare for toddlers using ITERS-R. *European Early Childhood Education Research Journal*, 26 (1), 111-127.
- Children and Families Agency (2023) Summary of the Situation of ECEC Facilities (April 1, 2023). (2023/09/21) (in Japanese)
- Harms, Thelma, Cryer Debby, Clifford, Richard M., & Yazejian Noreen (2017) *Infant/Toddler Environment Rating Scale, Third Edition (ITERS-3)*. Teachers College Press.
- OECD (2023) Indicator B2. How do early childhood education systems differ around the world? *Education at a Glance*.166-190.
- Otani, Takashi (2019) *Paradigm and Design of Qualitative Study: From Research Methodology to SCAT*. The University of Nagoya Press. (in Japanese)
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