

Movement & Tranquillity: Space makes the Difference Tool: Cartographic Observation

Context:

Location:	Kindergarten Neumarkt (Haus Unterland), Kindergarten district Neumarkt South Tyrol Italy
Details:	Age: 2-7 years Number of children: 100 children (5 groups), 16 educators
Building:	<p>Size, age, type: ? m2, year of construction 1970, renovation & new construction planned.</p> <p>The kindergarten building is part of Haus Unterland, a larger building complex used for cultural purposes. The building as a whole, as well as the kindergarten, is characterized by its architectural peculiarity. On the basis of squares or multiples of a square, the parts of the building are divided and each part is crowned by a glass roof peak. Due to this planning, all group rooms are parallel and have the same size. All group rooms open to the garden with a glass front and a double door. In each group room there is a play gallery, a checkroom and a bathroom.</p> <p>The building was constructed in 1970 and the kindergarten began operation in 1974 with three groups. In the meantime, the kindergarten has five groups and two groups had to be relocated to an adjacent building.</p> <p>As part of the renovation, an extension of the kindergarten building by one floor is planned.</p>
Kindergarten's context	Small town, everyday language: German
Aktivities	Workshops with the pedagogical team, observation and debriefing for communicative validation.
Stage in the design process:	in use reflection, POE



Tool: Cartographic Observation

<https://www.ncl.ac.uk/cored/tools/cartographic-observation/>

The instrument is first introduced to the pedagogical staff and the pedagogical team selects the rooms for the observation. Subsequently, the cartographic observation is carried out in two rooms on one morning during free play time.

Dates for implementation:

- June 1, 2021 Presentation of the tool and selection of observation rooms.
- September 28, 2021 Implementation of cartographic observation
- April 6, 2022 Workshop with the pedagogical staff, first discussion of the results
- June 9, 2022 Debriefing (communicative validation) with the kindergarten head and a representative of the kindergarten district.

Rationale for the activity and the tool used

In the kindergarten of the district of Neumarkt, space and room design have long been a topic in the pedagogical work and are actively supported by the kindergarten district management. Since the pedagogical concept of opening is basically applied, themes and functions are assigned to the individual rooms or parts of rooms. Thus, in all kindergartens there is a room for language education, a room for science or mathematics education, a movement room and studios for artistic work. The design of the rooms is adapted to the structural conditions in each kindergarten. In the Neumarkt kindergartens, the thematic assignments and the corresponding room design are more or less completed and are adapted annually to the needs of the children and the team.

In the main building, which has a very structured and clear appearance due to its architecture, there are three group rooms, the kitchen with dining area for the children and the office of the kindergarten management. The square basic pattern is striking. It makes each area appear similar in size and is crowned by a pyramid-shaped glass roof. The interior design is also special: the walls are covered in textured plaster typical of the 1970s, and the corners of the room and the window struts are made of metal and highlighted in yellow.

Currently, the kindergarten also has to use an outbuilding. There, the room situation is completely different. Here, two groups are housed on the second floor above a supermarket, which are also comparable in size. The annex has a kitchen, a wardrobe in the entrance area and a movement room. The access situation to the annexe, which leads across the supermarket parking lot, is problematic. The children can only get from one building to the other if they are accompanied. According to the current status, the pedagogical concept of opening up can only be implemented in the respective building and not in the entire kindergarten. Both the children and the pedagogical staff are waiting for the renovation and extension of the original kindergarten building.

By comparing these two locations in one kindergarten, different approaches, pedagogical beliefs and spatial conditions can be shown. From an educational science perspective, the question arises as to which factor is more effective, the pedagogical beliefs of the educators or the spatial design options in the respective buildings. The common space of experience of the kindergarten teachers is the examination of the space as a third educator in their daily work, but also in the elaboration of the annual plans with the kindergarten management.

Case study description: Process

Participants: kindergarten head, pedagogical team and a representative of the kindergarten district.

In a preparatory meeting with the kindergarten head and a representative of the kindergarten district, the steps of the joint work with the instrument were determined and the rooms for the mapped observation were selected. Ideas for the room design as a whole were discussed, but also the special framework conditions of the pedagogical work due to the regulations during the pandemic.

In a second meeting the instrument was tested, i.e. the cartographic observation was conducted by the CoReD researcher. One observation takes place in a regular group room in the main building and one in the movement room in the annex building. The focus of the observation is on the movement patterns of the educator and their use of space during the phase of free play time.

In a joint workshop, the initial results from the cartographic observation were analyzed together with the pedagogical team and further considerations were made regarding room design and room use.

In a debriefing with the kindergarten head and a representative of the kindergarten district, the results were validated communicatively and the limits and possibilities of the instrument for use in everyday pedagogical life were discussed.

Photo* Documentation – Rooms for cartographic observation

Neumarkt,
Movement room
(outbuilding)



Neumarkt,
Grouproom
(Main building)



Description of the case study: results

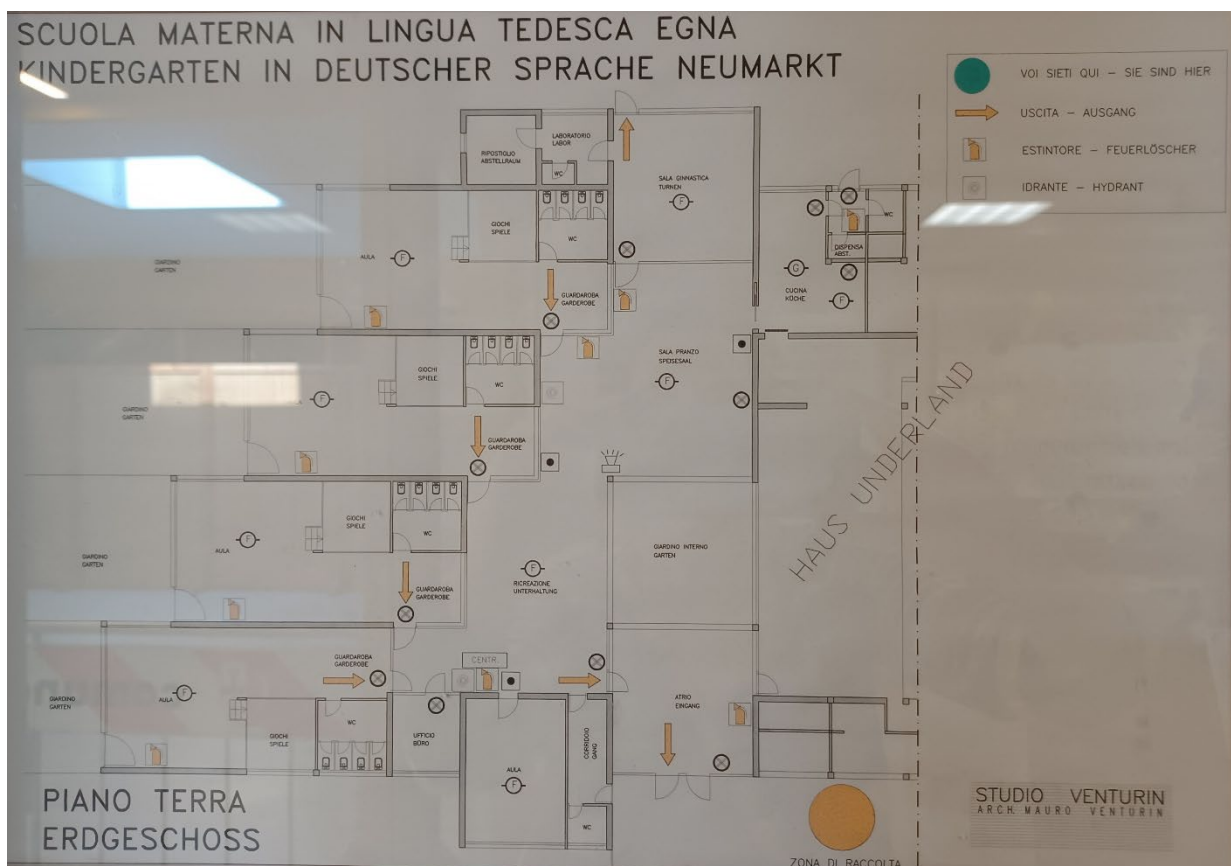
Objective of the observation

The aim of the first workshop with the pedagogical staff was to get to know the tool "Cartographic Observation" and to plan the further collaboration in the project. For this purpose, the rooms of the kindergarten were inspected, and two areas were selected where the observation would take place: the movement room in the adjacent building and a group room in the main building. The observation will focus on the movement patterns of the kindergarten teacher.

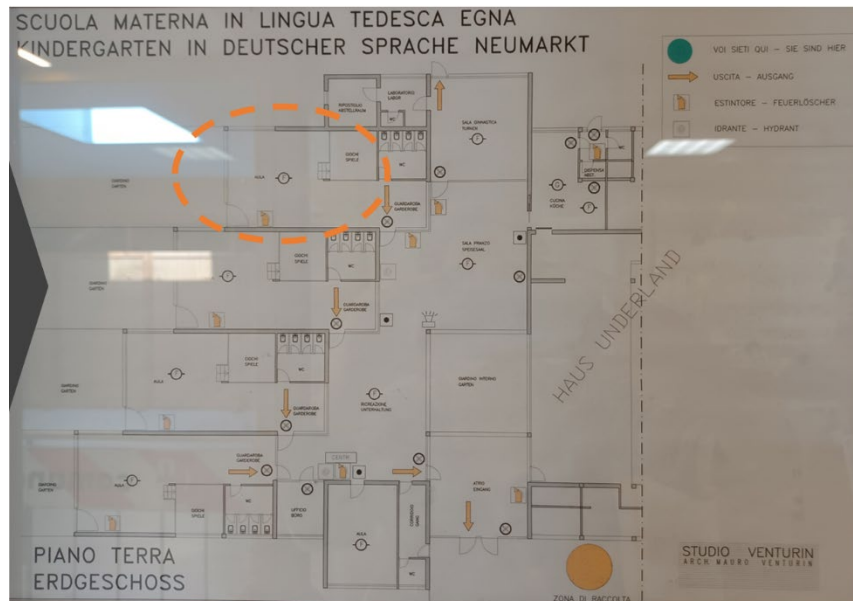
The cartographic observations take place one morning during free play time. The Cartographic Observation is conducted by a staff member from the CoReD project. In the afternoon, the first observation impressions are discussed with the pedagogical team. After the evaluation of the cartographic observations by the CoReD researcher, the results are communicatively validated in another workshop and subsequently analyzed again in a debriefing with the kindergarten head and a representative of the kindergarten district, from the perspective of pedagogical practice and with regard to the usefulness of the instrument.

Floor plan of the kindergarten (first floor)

MAIN BUILDING



Group room - location of the room for cartographic observation

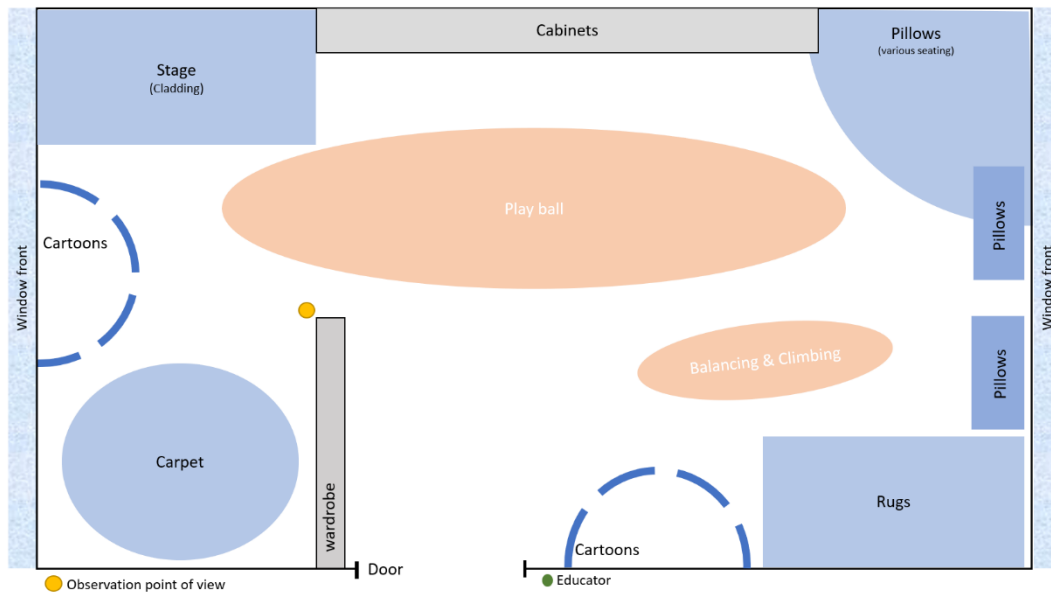


Observation protocols & results

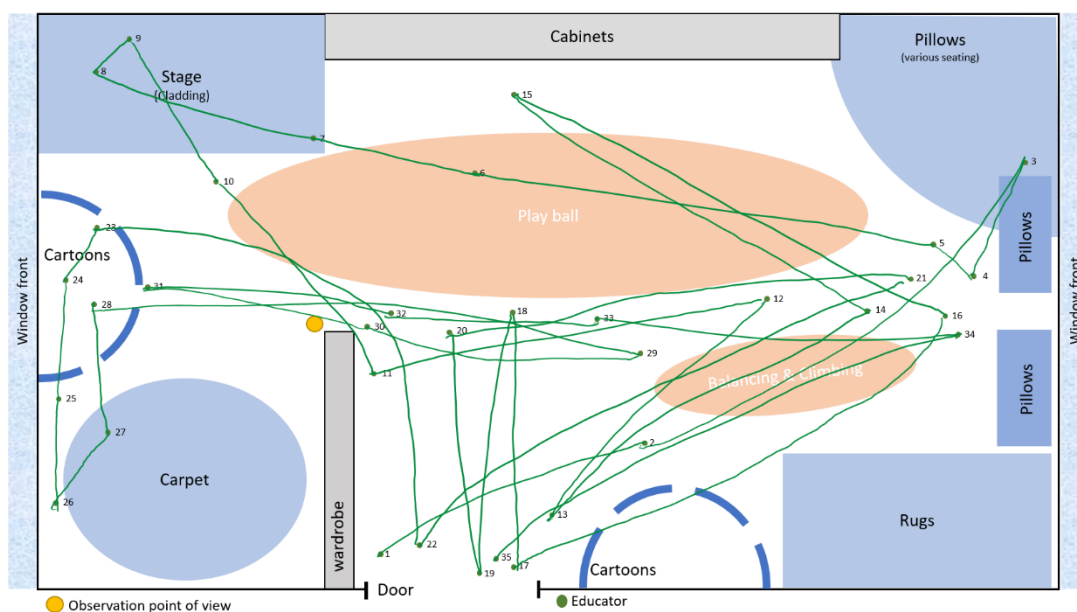
MOVEMENT ROOM - OUTBUILDING

Observation time: 08:47-09:30, free play time.

Drawn floor plan for observation:



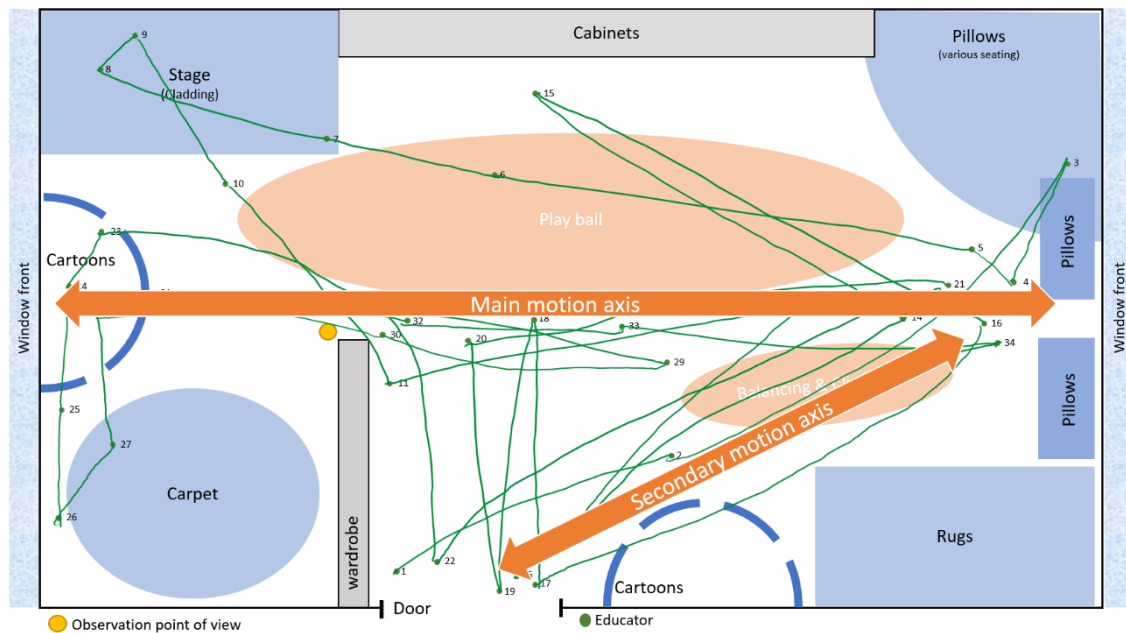
Movement patterns educator



Activities of the educator and interaction with the children

Activity		Timeline	
1	Observe, survey the space	1	08:47
2	Change focus	2	08:48
3	Looking out the window with a child, children arriving	3	08:50
4	Observe, survey the room	4	08:54
5	Change focus	5	08:54 20 sec.
6	Calm play	6	08:55
7	Help	7	08:56
8	Helping, helping to dress up	8	08:56 30 sec.
9	Help, help to search	9	08:57
10	Observe, survey the room	10	08:57 20 sec.
11	Welcoming new children	11	08:58
12	Mediate, clarify	12	08:59
13	Observe, survey the room	13	08:59 20 sec.
14	Comfort, clarify	14	09:00
15	Change focus	15	09:02
16	Observe, survey the room	16	09:02 10 sec.
17	Greet, Say goodbye	17	09:02 20 sec.
18	Challenge	18	09:03
19	Greet	19	09:04
20	Observe, survey the room	20	09:04 20 sec.
21	Change focus	21	09:05
22	Greet, say goodbye	22	09:06
23	Build with	23	09:06 20 sec.
24	Observe, survey the room	24	09:07
25	Help	25	09:09
26	Comfort	26	09:10
27	Observe, survey the room	27	09:12
28	Helping to build	28	09:15
29	Listening	29	09:18
30	Short agreement	30	09:19
31	Clarify, show boundaries	31	09:19 40 sec.
32	Snack (break)	32	09:20
33	Comforting	33	09:22
34	Comforting	34	09:24
35	Greeting, saying goodbye	35	09:28

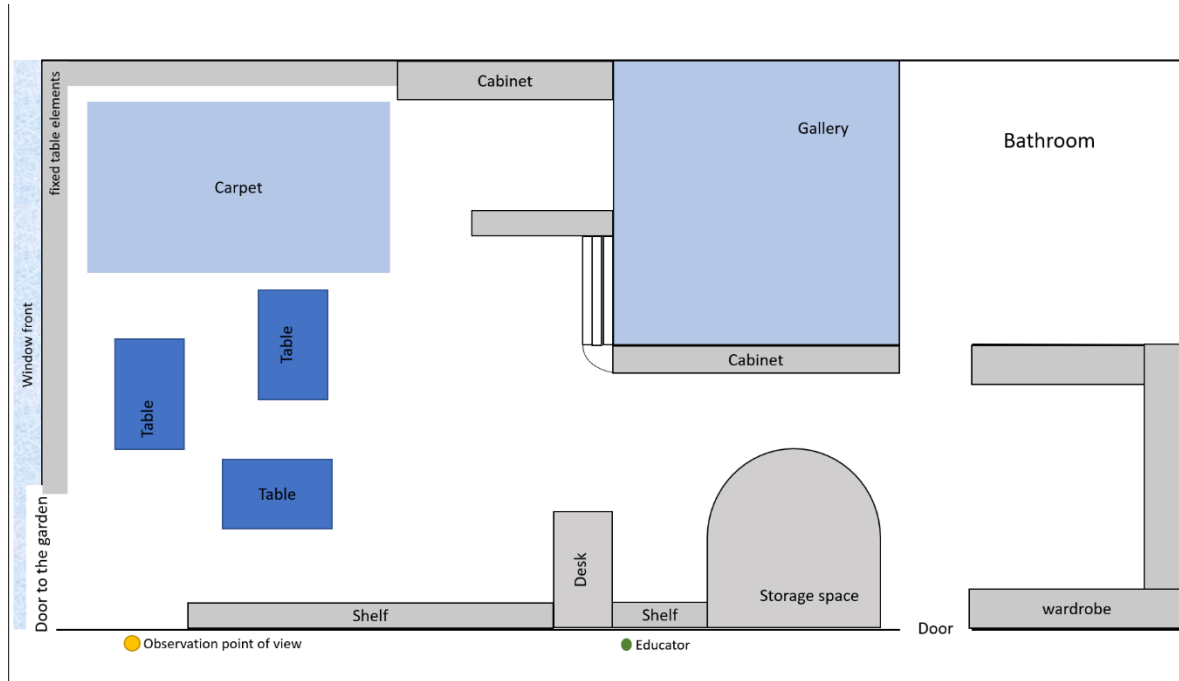
Analysis of movement patterns



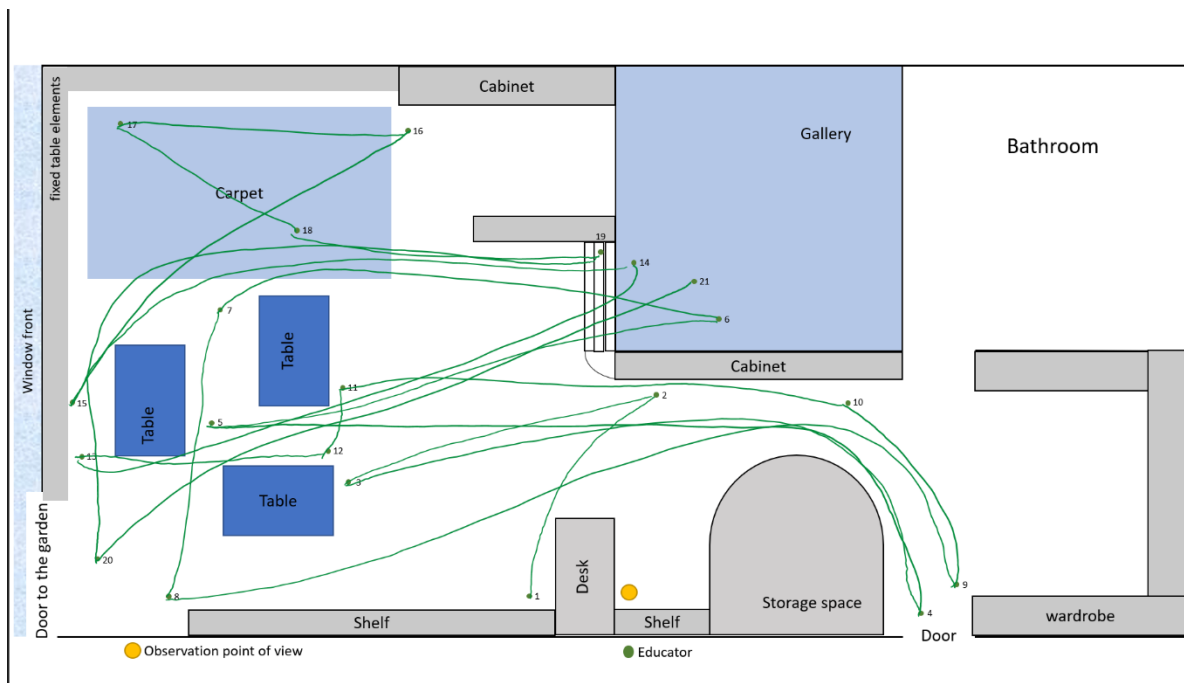
GROUP ROOM (MAIN BUILDING)

Observation time: 10:00-10:30 a.m., free play time.

Drawn floor plan for observation:



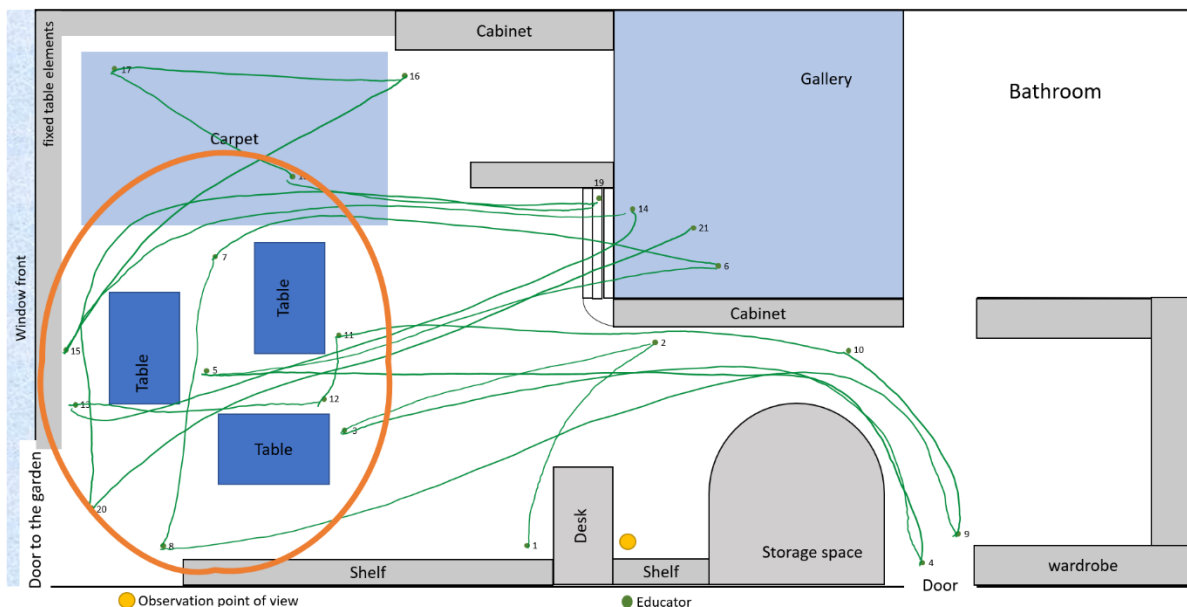
Movement pattern educator



Activities of the educator and interaction with children

Activity		Timeline	
1	Advise	1	10:00
2	Sorting, explaining	2	10:08
3	Support	3	10:09
4	Arrangement, "finish snack"	4	10:10
5	Explain, arrangement with a colleague	5	10:12
6	Clarify, comfort	6	10:15
7	Handicrafts with two children	7	10:16
8	Help	8	10:20
9	Checking	9	10:21
10	Helping	10	10:22
11	Watching	11	10:22 30 sec.
12	Cleaning up	12	10:23
13	Sort, Clean up	13	10:23 40 sec.
14	Look up	14	10:24
15	Sort, Clean upClean up	15	10:24 20 sec.
16	Clean up	16	10:25
17	Guide tidying up	17	10:25 30 sec.
18	Remind to clean up	18	10:26
19	Open access to the garden	19	10:28
20	Help, motivate to clean up	20	10:28 40 sec.
21	Advise	21	10:29

Analysis of movement patterns



Discussion with the kindergarten head and a representative of the kindergarten district about cartographic observation

On the basis of the sketches, it is noticeable that the movement possibilities of the educator are conditioned by the furniture and the equipment of the room. This can have a constricting or an invigorating effect. But the room design itself is only one aspect, much more important is the activity of the children in the room. In the kindergarten and in the situation of free play time, it is essential for the pedagogical professional to observe the activities of the children, to accompany them and, if desired by the children, to participate in their activities. A typical division into phases, as is familiar from the school situation, is not found in the movement pattern and in the activities of the educator.

The observed rooms are very different, on the one hand because of the architectural structure and on the other hand with regard to the use in the kindergarten everyday life. The movement room in the adjacent building is used exclusively for movement and is available at all times to the children who are housed in the adjacent building. Therefore, during the observation time, there is a lively coming and going of the children. Therefore, a targeted observation of the children in combination with the observation of the educator was not possible. From the movement pattern of the educator, however, it can be concluded that there are core areas of the children's activities that require observation and support by the educator. This is, on the one hand, the area of the stage with the possibilities of dressing up and, on the other hand, the areas in which cardboard boxes are available for building. In both activity zones, the support of the educator is needed, for example, when dressing up the disguises or when mediating a dispute when the children are building with the cardboard boxes. The areas for ball games and balancing/climbing are used independently by the children. Here, the educator must keep an eye on what is happening in order to be able to intervene quickly if necessary. These aspects explain the wide and intensive movement space of the educator.

In the group room of the main building, the situation is quite different. The room itself is smaller and pre-structured by the fixtures. In addition, the theme of the room also dictates the activities of the children, as well as the educator. The observation took place towards the end of the free play time. During this time, the room must be cleaned up and the main task of the educator is to motivate the children to clean up. After cleaning up, the children leave the room and go to the garden. Therefore, only a few children were present in the room, either finishing a craft or putting away their toys. The movement pattern of the educator shows that she first chooses a location where she has an overview of what is happening in the room. Only when the children need help or are not making progress with tidying up, does the educator go to the children. In this way, she achieves a certain motivating control through her physical proximity alone. Overall, the atmosphere is calm and relaxed and there are no conflicts between the children or between the children and the educator.

From these observations, it is clear that although the room and its design provide a pattern of behavior and movement, it is the individual use by the educator that matters. This use of the space, in turn, depends crucially on the pedagogical theory and personal beliefs of the educator.

Based on the cartographic observations, the kindergarten head makes the decision to deal with the topic of pedagogical attitude and the activity of observation in an exchange with the colleagues.

The planning and implementation phase of the renovation and expansion of the main building should also become a topic in the further cooperation. In particular, the pedagogical specialists expect to receive argumentation aids from the pedagogical perspective vis-à-vis architects and property developers.