

**7x7 hideaways:**  
**Heptagon as basic pattern**  
 Tool: Cartographic Observation

**Context:**



<b>Kindergarten location</b>	<b>German-speaking Kindergarten Milland South Tyrol, Italien</b>
<b>Details</b>	<b>Age of children: 2-7 years</b> <b>Kindergarten size:</b> <b>90 children (4 groups), 12 educators.</b> <b>Pedagogical orientation: Inclusive approach and pedagogical concept of opening up</b>
<b>Building characteristics</b>	<b>Size, age, typ:</b> <b>Approx. 250 m2, ground floor and basement, built in 1970.</b> <b>Architectural feature:</b> <b>The building on a slope is planned based on the basic pattern of a heptagon. This allowed the four group rooms to be arranged around a central entrance area and pushed into each other to save space. This creates niches and corners in each room for playing, hiding and as a place of retreat.</b> <b>All group rooms are located on the ground floor, while the movement room and three other functional rooms are located in the basement.</b>
<b>Context</b>	<b>Small town, predominantly German-speaking environment</b>
<b>Project activity</b>	<b>Spiel- und Interaktionsmöglichkeiten in den Gruppenräumen</b>
<b>Process stage:</b>	<b>in use reflection</b>



## Tool: Cartographic Observation

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

The instrument is presented in a workshop and tried out with the pedagogical staff. Following the testing of the Diamond Ranking instrument (see individual case study: Drop-off & pick-up: Movement Possibilities in the Entrance Area of the Kindergarten), the pedagogical team will determine the observation assignment for testing the Cartographic Observation.

Dates of implementation:

- 21 November Workshop with pedagogical staff.
- 4 April 2022 Cartographic observation in the kindergarten
- 16 May 2022 Discussion of results with the pedagogical staff



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## Rationale for the activity and the instrument used

In the kindergarten district of Brixen, space and room design have long been a topic in the pedagogical work and are actively supported by the kindergarten district management. As 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 of the district there is a room for language education, a room for science and/or mathematics education, a movement room and studios for artistic work. The design of the rooms in each kindergarten is adapted to the structural conditions.

In the pedagogical concept of opening up, the children have the opportunity to use the rooms throughout the kindergarten according to their needs during free play time. In doing so, they are accompanied by the pedagogical staff and encouraged to deal with different topics and play ideas.

In the Milland kindergarten, 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 pedagogical team. For each room with its thematic focus, there is a pedagogical specialist in the kindergarten who, as an expert, designs the room, i.e. furnishes it and equips it with materials. In Milland, there are four rooms on the ground floor with correspondingly different thematic focuses:

- Creative space
- Construction room
- Number room
- Role play room

In the basement there are further rooms for artistic design, for experimentation, for language and music, as well as the movement room.

The pedagogical concept of opening up assumes that children use the rooms according to their individual needs and interests. Therefore, not every child is in every room every day, but rather in one room and then in another, depending on their play and learning interests. The task of the educational staff is to accompany the children in their activities and to offer them activities in the rooms. In doing so, they have to keep an overview and make sure that the children also deal with topics and contents that they may not like or that they do not trust themselves to deal with.

In the Milland kindergarten, the pedagogical team asks itself how it is possible to keep an overview in the rooms, some of which have many nooks and crannies, without having to control the children. It is also interesting to see whether there are visible and thus obvious differences in the children's use of the rooms.

## Individual case description: Implementation

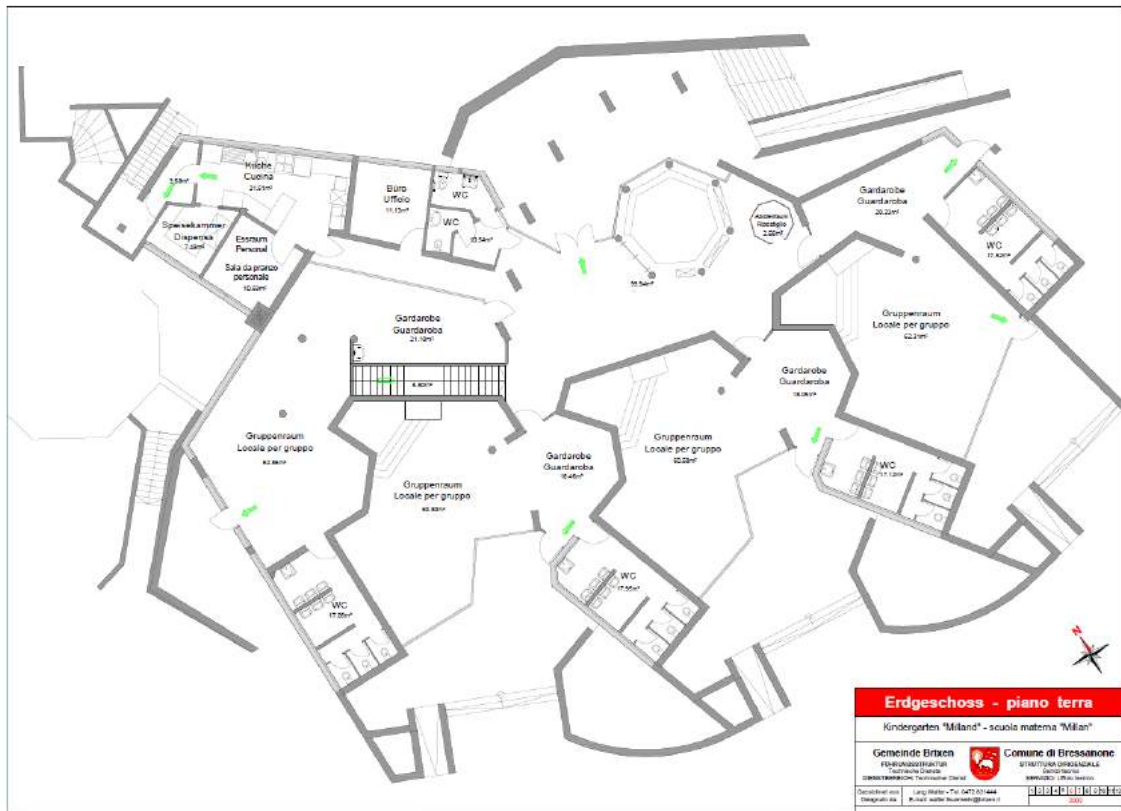
**Participants: Kindergarten head, team and a representative of the kindergarten management.**

In a preparatory meeting with the kindergarten head and a representative of the kindergarten management, the steps of the joint work with the instrument were determined. Ideas of 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.

Following the testing of the Diamond Ranking instrument (see individual case study: Drop-off & Pick-up: Movement Possibilities in the Entrance Area of the Kindergarten), the pedagogical staff found that it is sometimes difficult to keep an overview during free play time without controlling the children and also to find enough time for individual support. From this result, the observation task for testing the instrument of cartographic observation has emerged: On the one hand, the movement pattern of the teacher and the play activities of the children in the respective room are to be observed. The observation is to be carried out in all four group rooms.

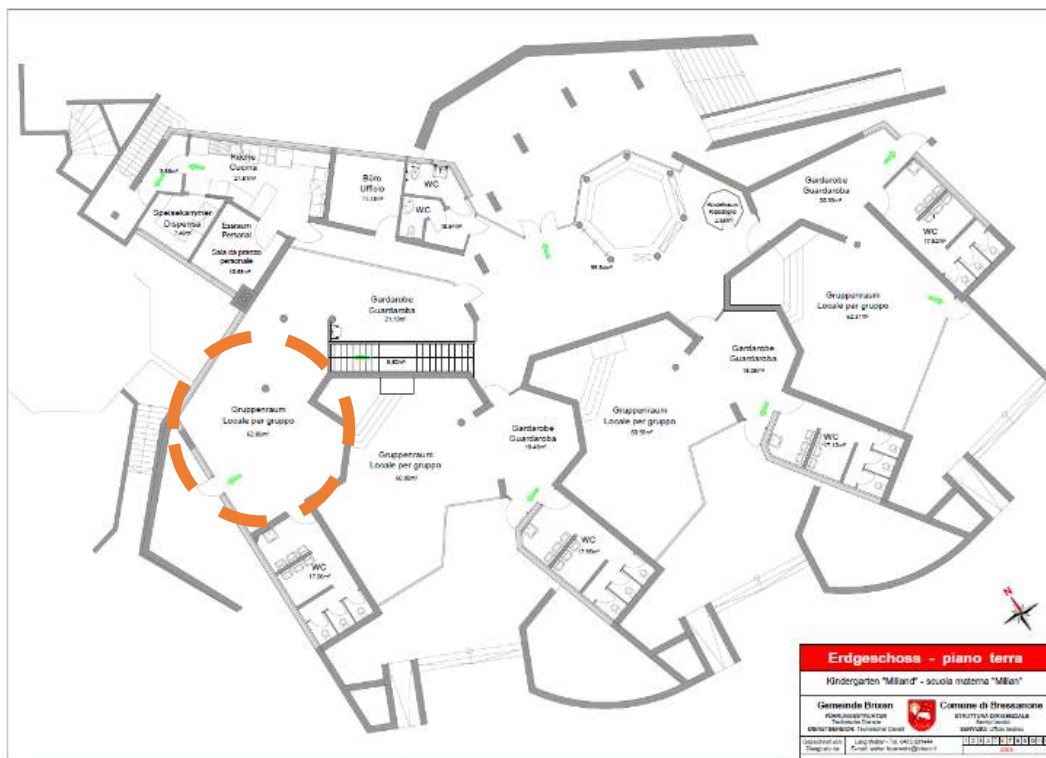
The cartographic observations take place one morning during free play time. The cartographic observation was carried out by a staff member from the CoReD project. In the afternoon, the first observation impressions were discussed with the pedagogical team. After the evaluation of the cartographic observations by the CoReD researcher, the results will be validated communicatively in another workshop.

## Floor plan of the kindergarten (ground floor)

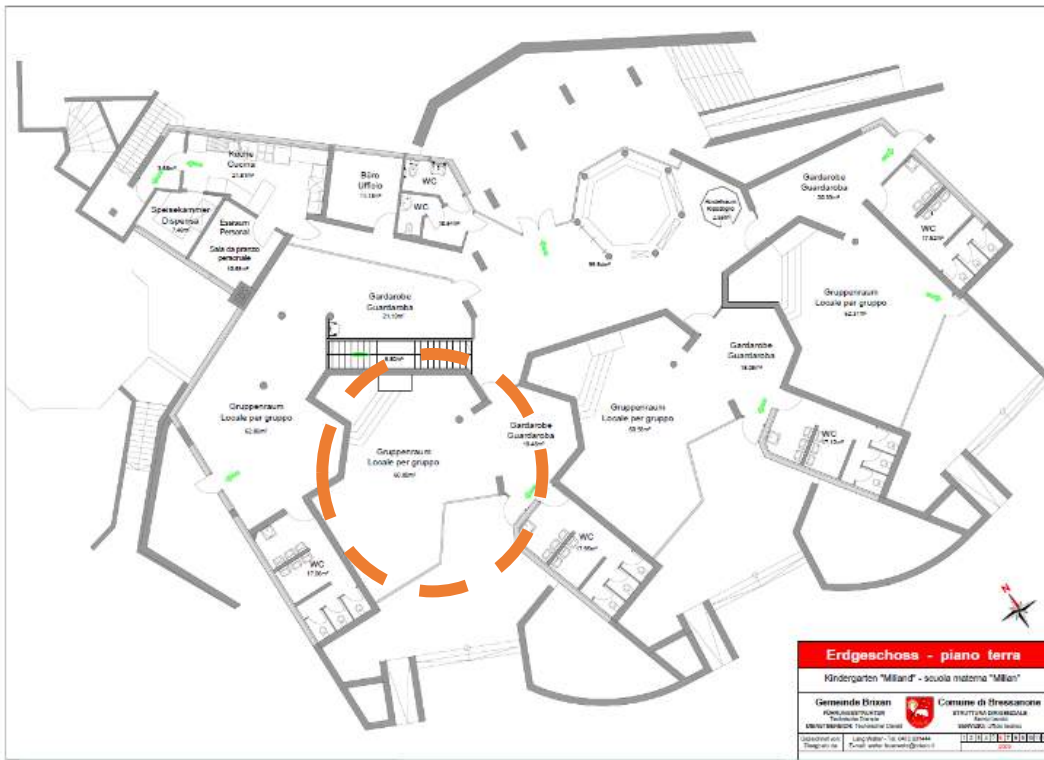


## Location of the rooms for cartographic observation

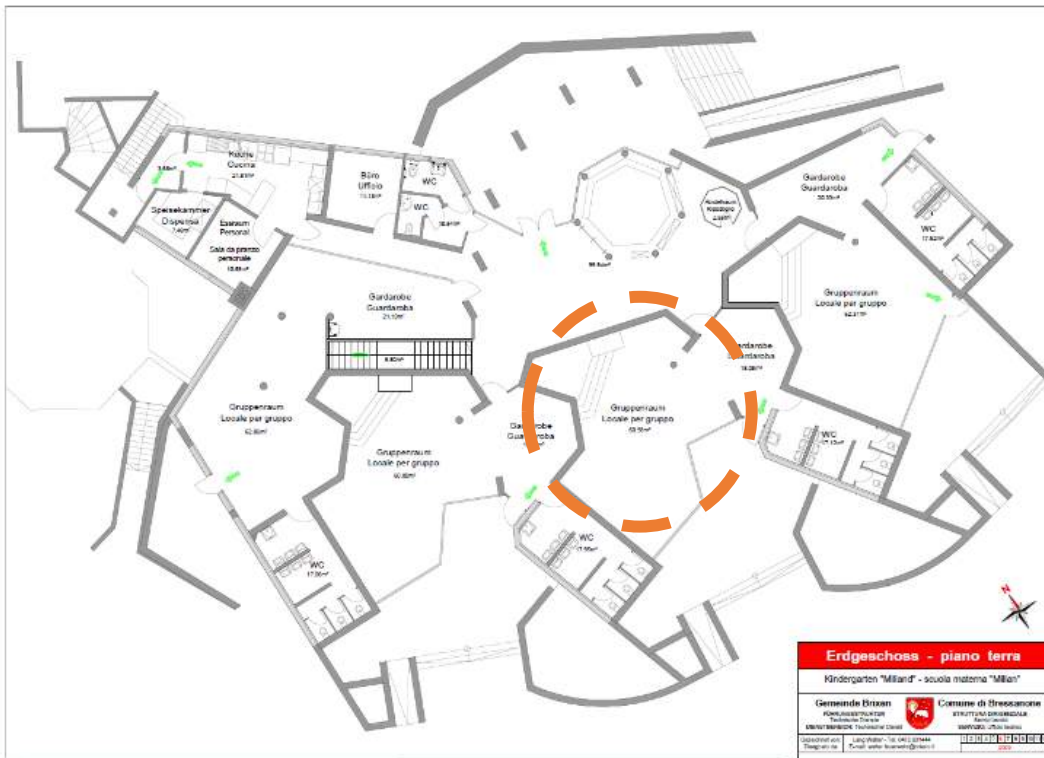
Creativ space (62,86 m<sup>2</sup>)



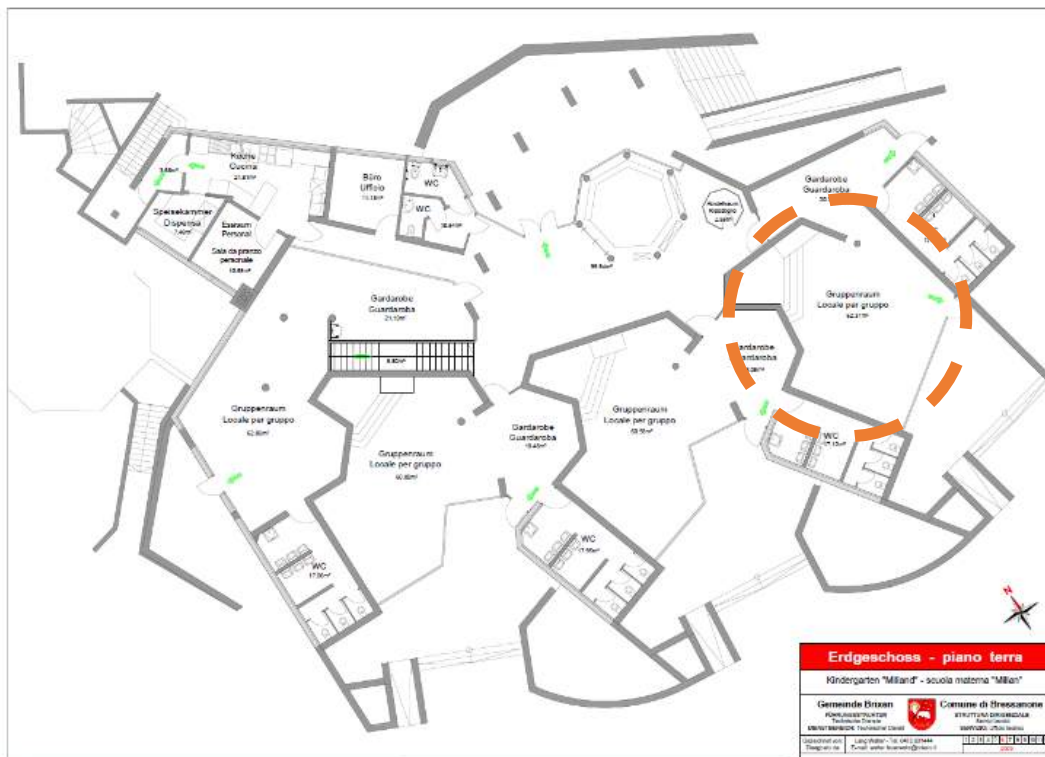
Construction room (60,80 m<sup>2</sup>)



Number room (60,58 m<sup>2</sup>)



Role play room (62,31 m<sup>2</sup>)



Photo\* documentation of the cartographic observation rooms

Creative space



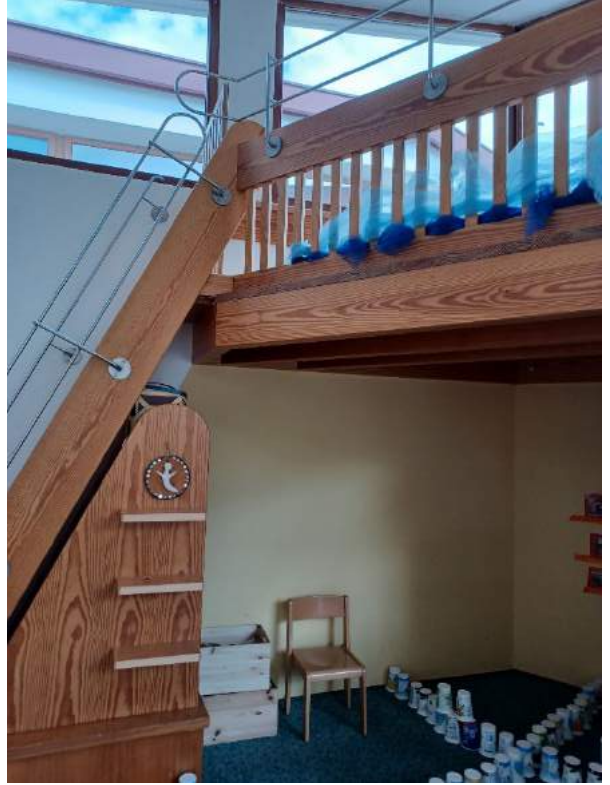
\* © Stadler-Altman, 2022



Construction room







Number room





Role play room



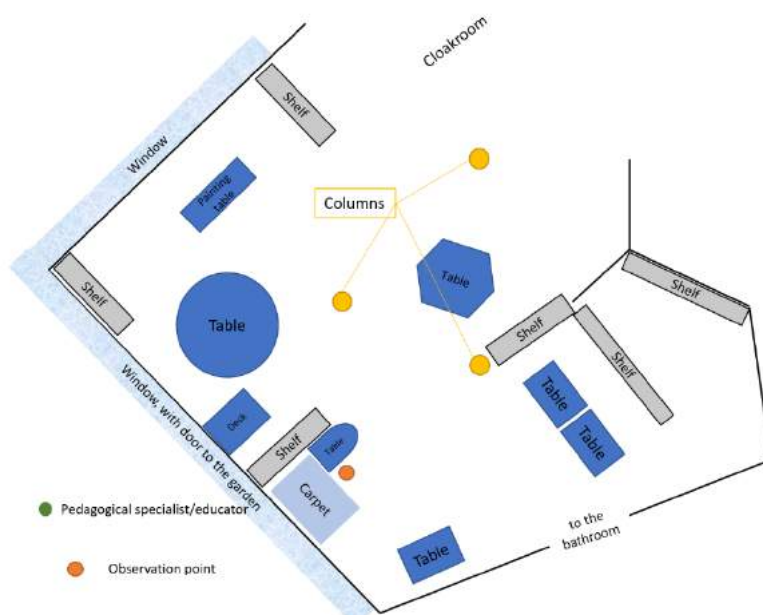


## Observation protocols & results

### CREATIV SPACE

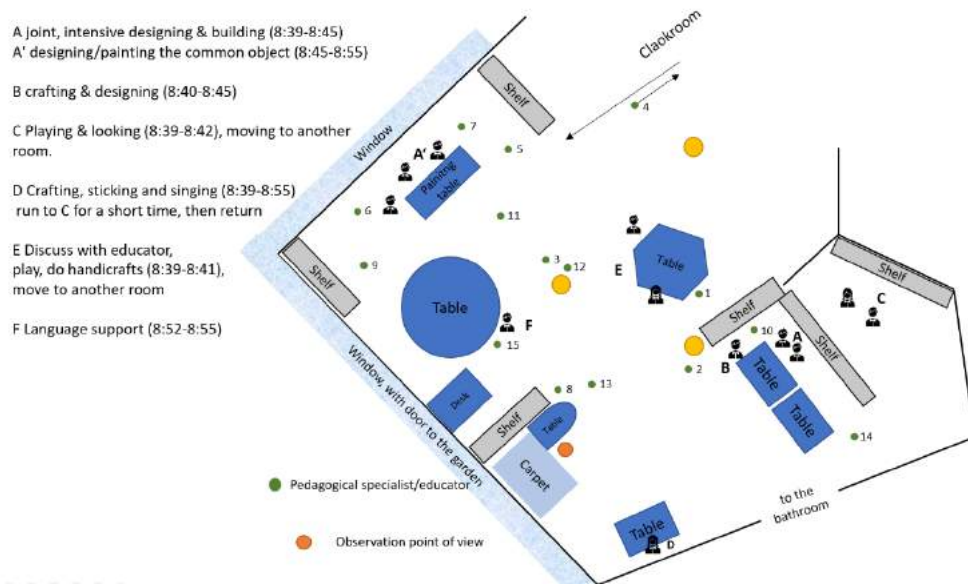
Observation time: 08:39-08:55, free play time

Drawn floor plan for observation:

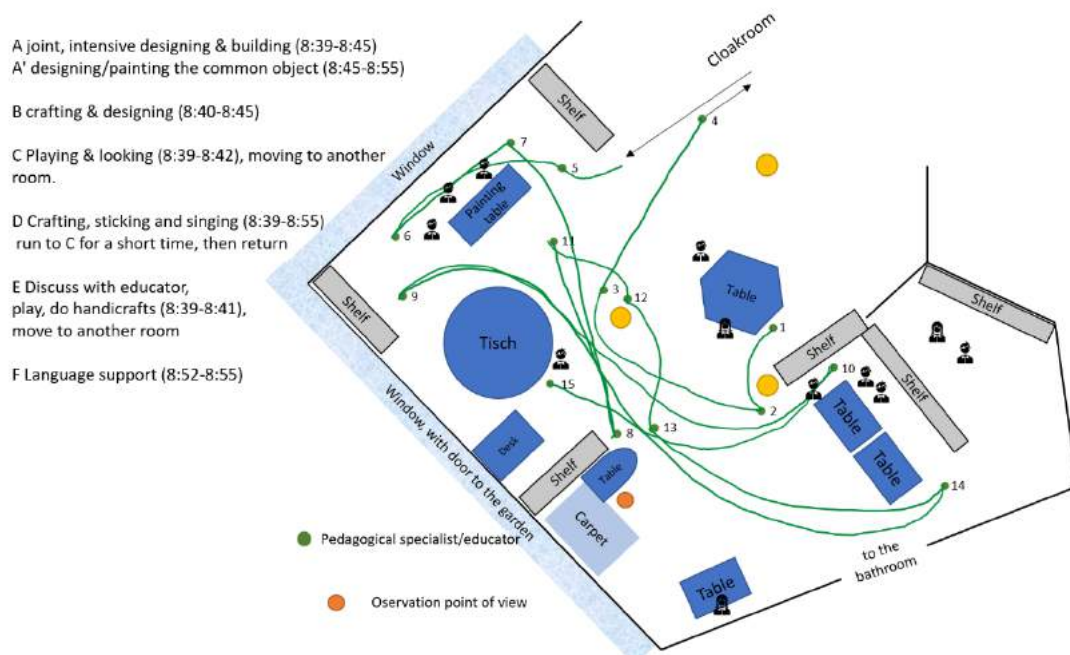




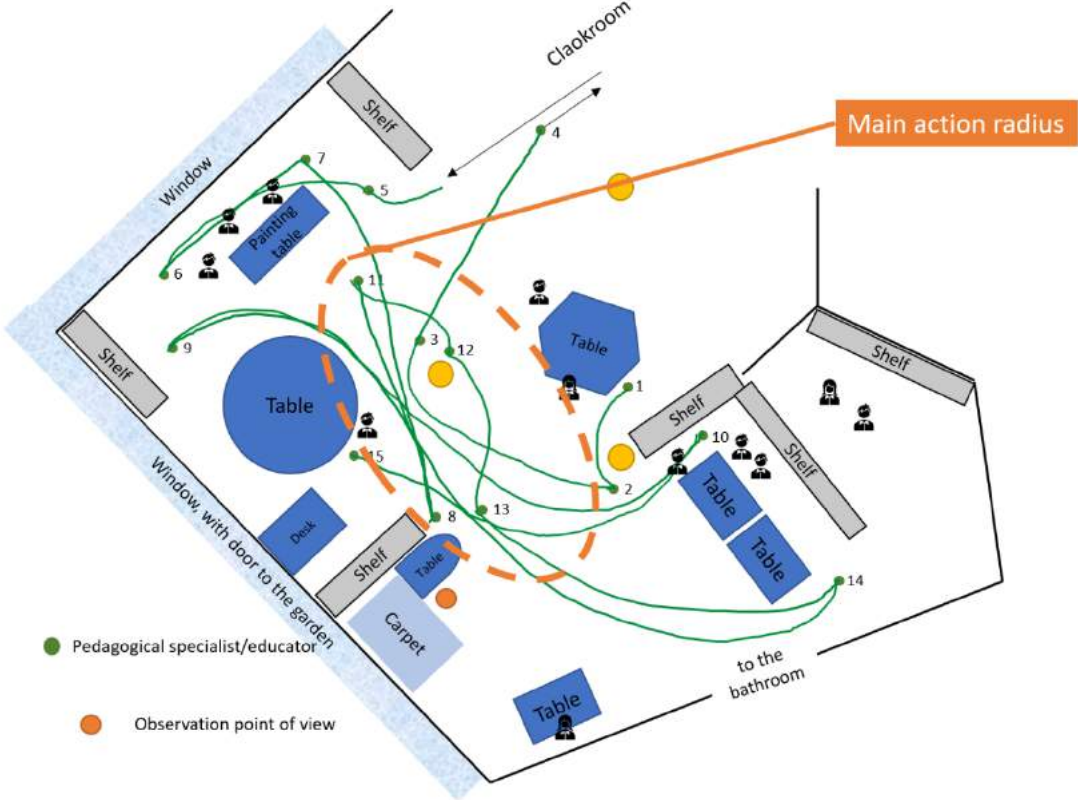
## Children activities



## Combination: movement patterns of the educator & activities of the children



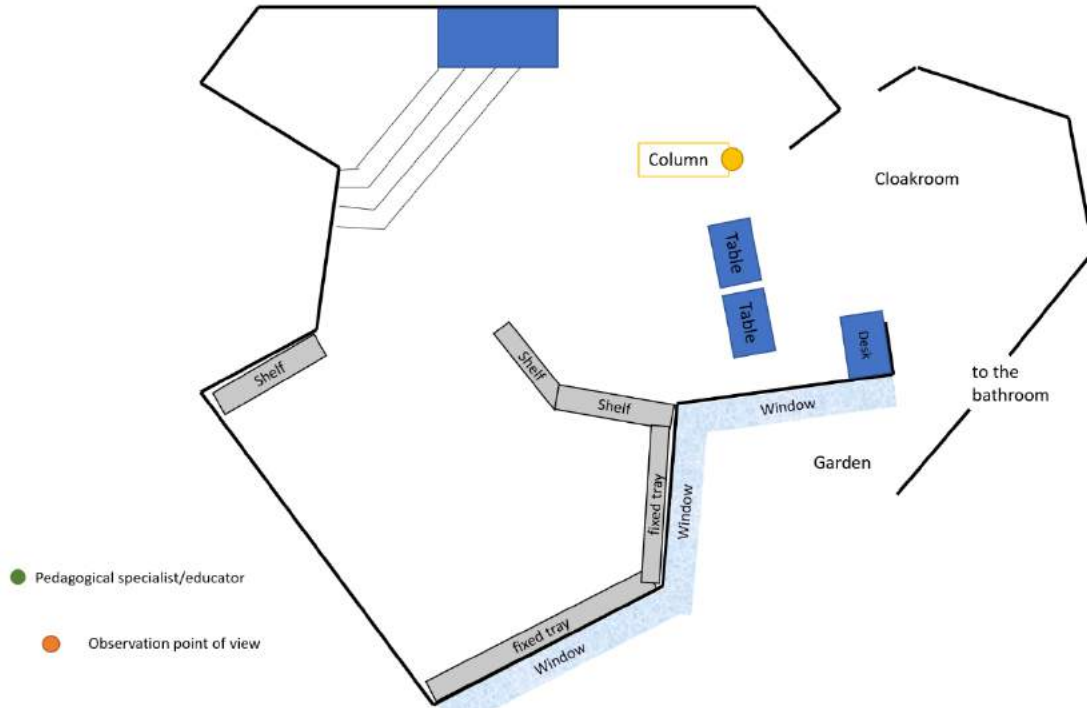
Analysis of movement patterns



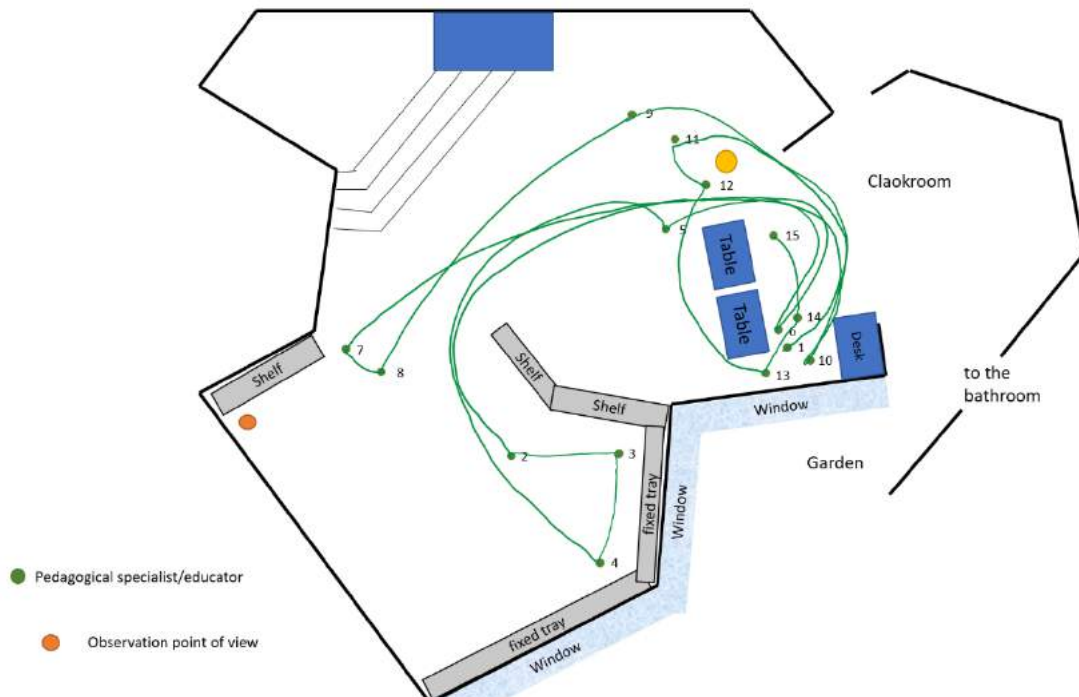
# CONSTRUCTION ROOM

Observation period: 09:00-09:15, free play time

Drawn floor plan for observation



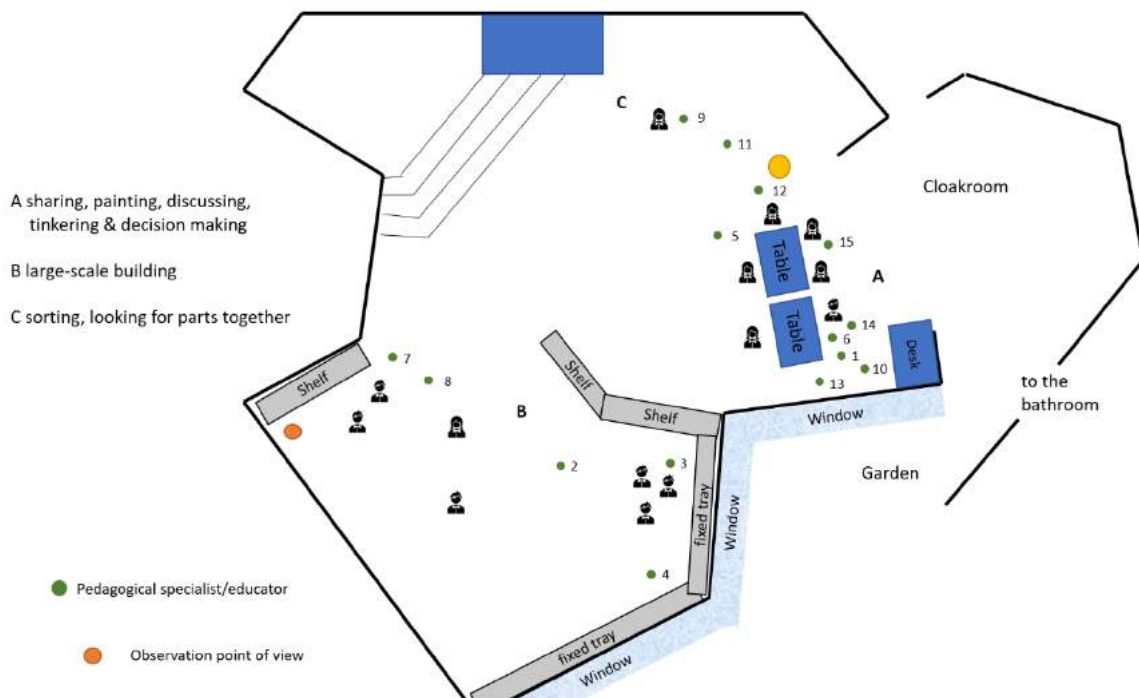
Movement pattern educator



## Activities of the educator and interaction with children

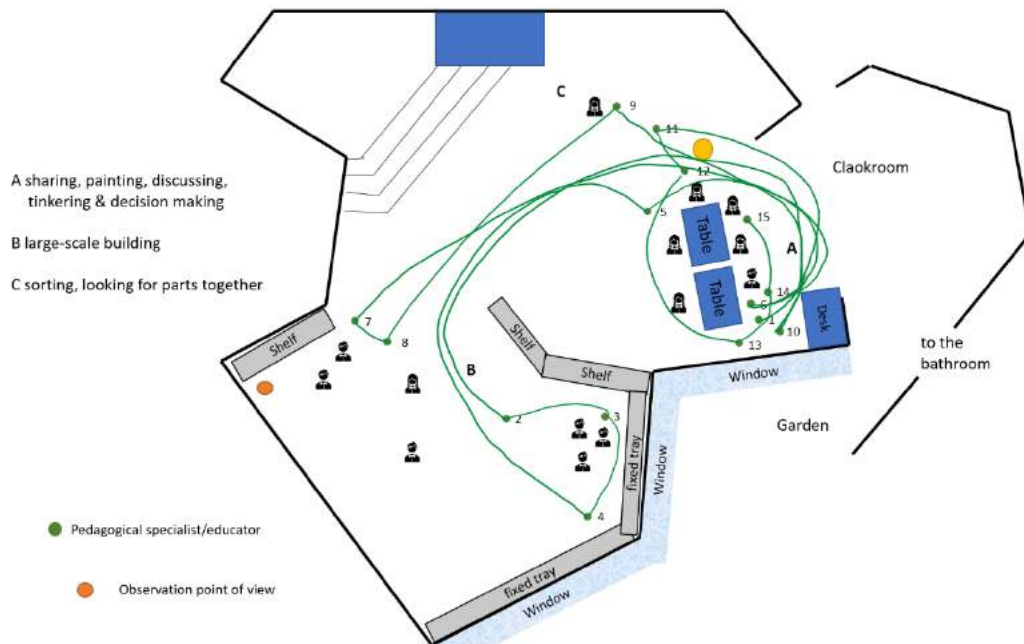
Activity		Timeline	
1	Tinkering, helping, listening, trying things out together	1	09:00
2	Guide tidying up, explain	2	09:01
3	Clean up, support sorting	3	09:02
4	Clean up, support sorting	4	09:02 30sec.
5	Observe	5	09:05
6	Observe	6	09:06
7	Admire, marvel, praise	7	09:07
8	Settle	8	09:08
9	Clarify	9	09:08 20sec.
10	Tinkering, helping, listening, trying out together	10	09:09
11	Checking, clarifying unrest	11	09:11
12	Support tidying up	12	09:12
13	Observe, support	13	09:13
14	Inquire more precisely	14	09:13 20sec
15	Get an overview	15	09:15

## Children activities

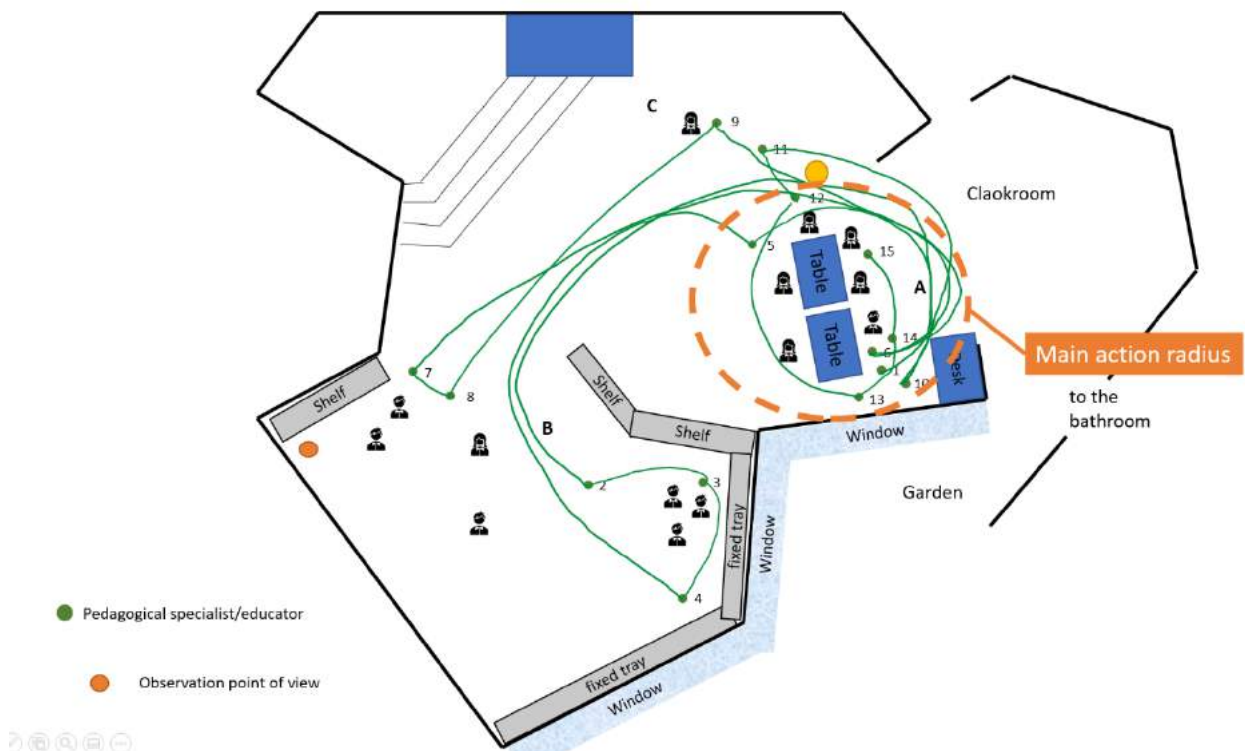




## Combination: movement patterns of the educator & activities of the children



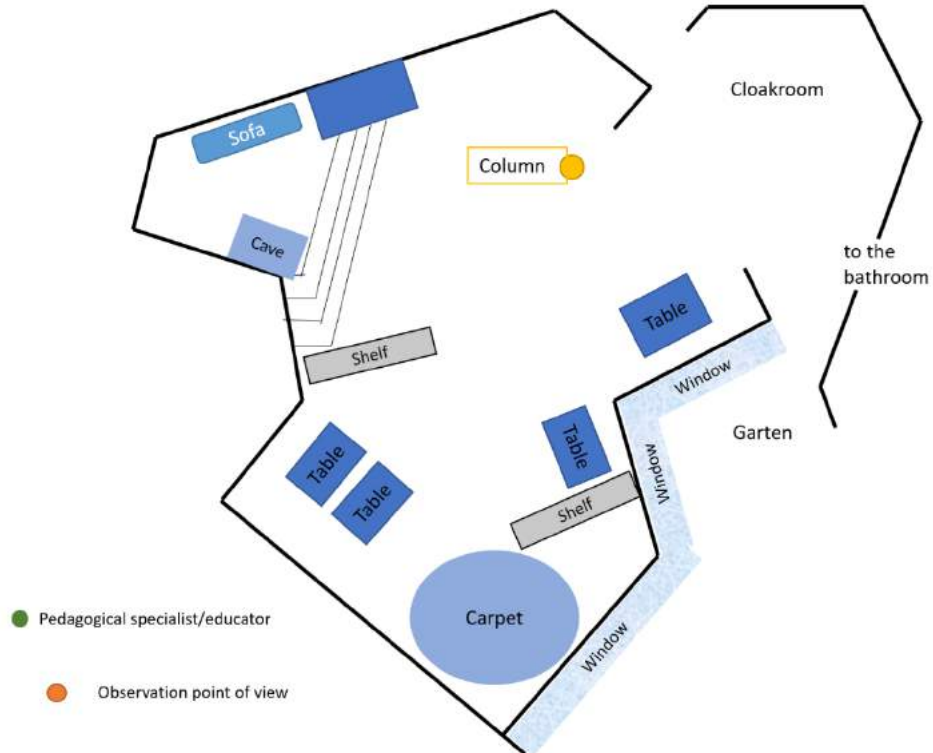
## Analysis of movement patterns



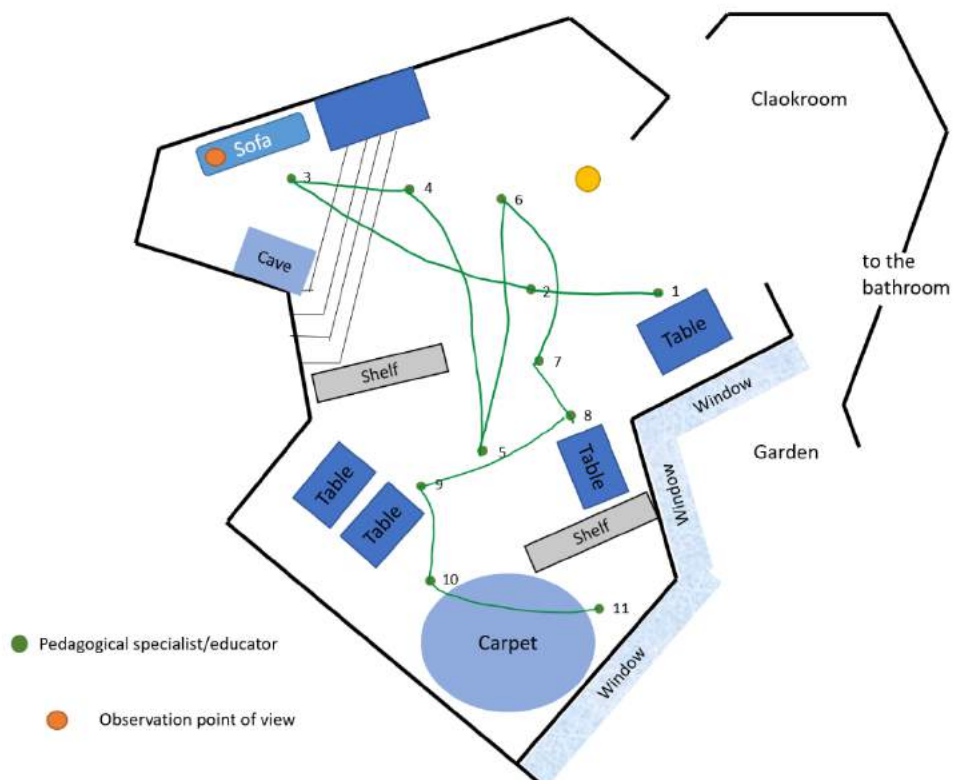
## NUMBER ROOM

Observation period: 09:25-09:45, free play time

Drawn floor plan for observation



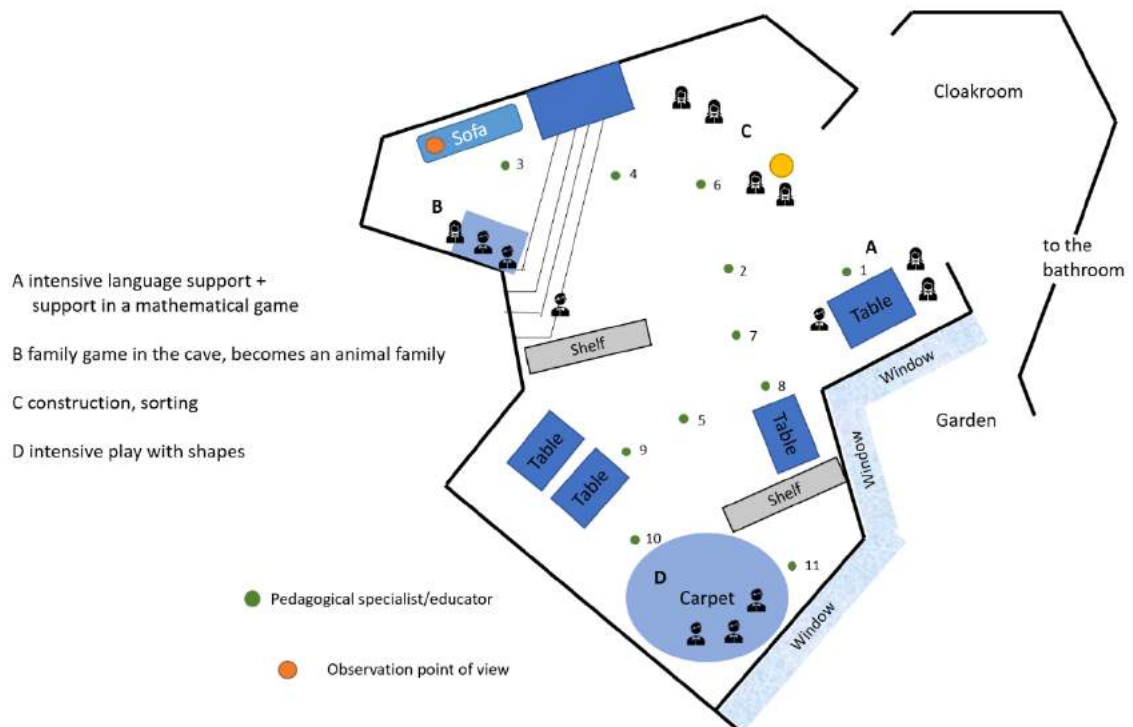
Movement pattern educator



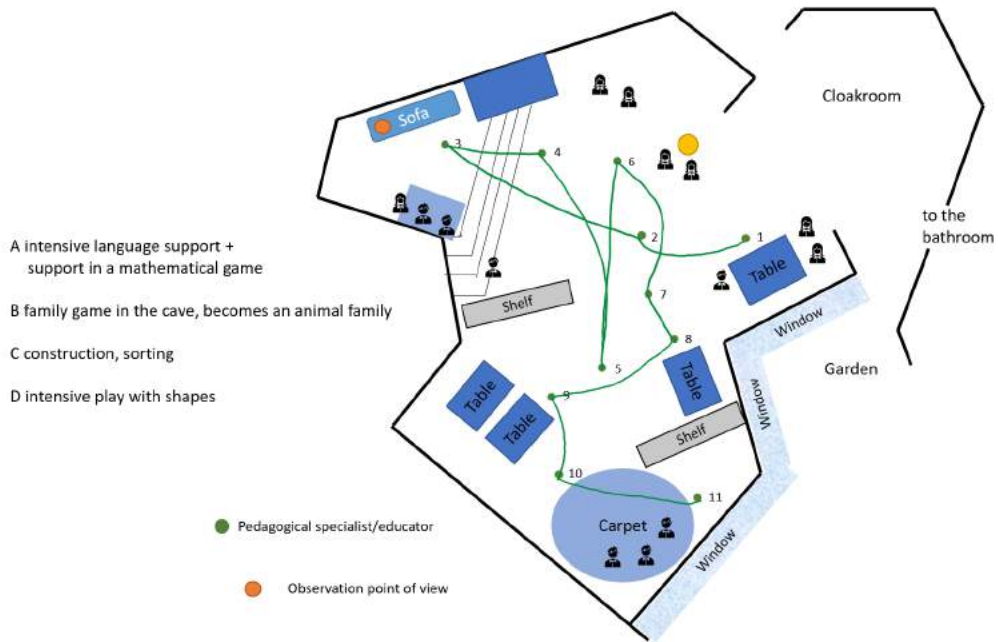
## Activities of the educator and interaction with children

Activityt		Timeline	
1	Intensive language support for one child, group in view	1	09:25
2	Provide overview	2	09:34
3	Mediate	3	09:35
4	Observe	4	09:35 30sec.
5	Observe	5	09:36
6	Look under the gallery	6	09:36 40sec.
7	View drawings, praise	7	09:41
8	View drawings, praise	8	09:42
9	Overview	9	09:43
10	Guide clean up	10	09:44
11	Support	11	09:45

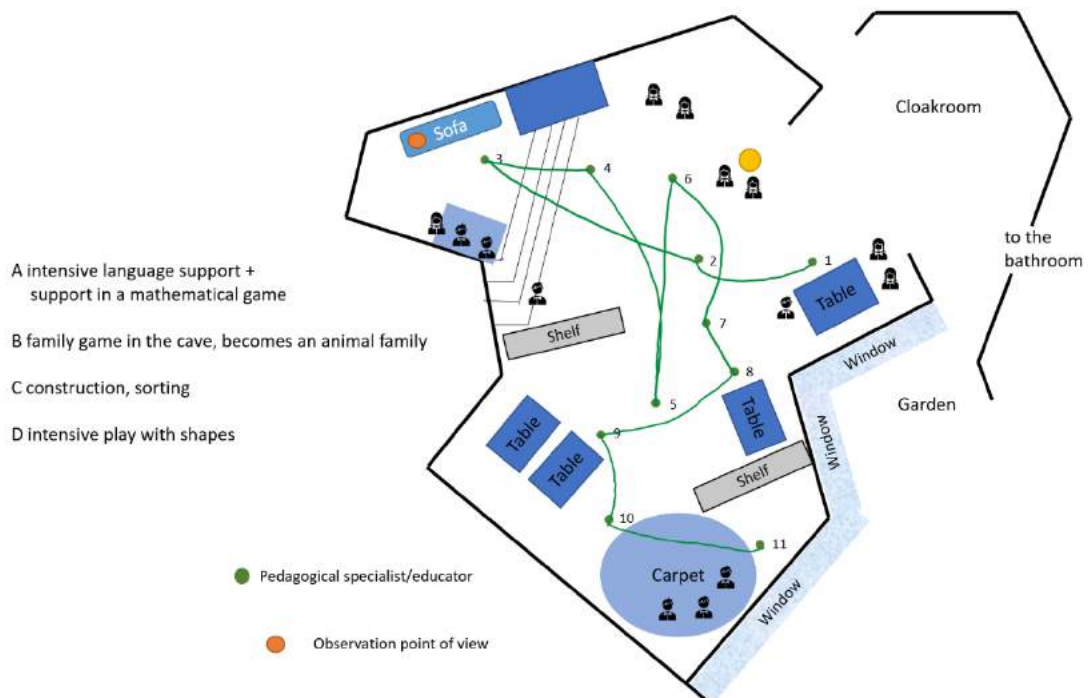
## Children activities



## Combination: movement patterns of the educator & activities of the children



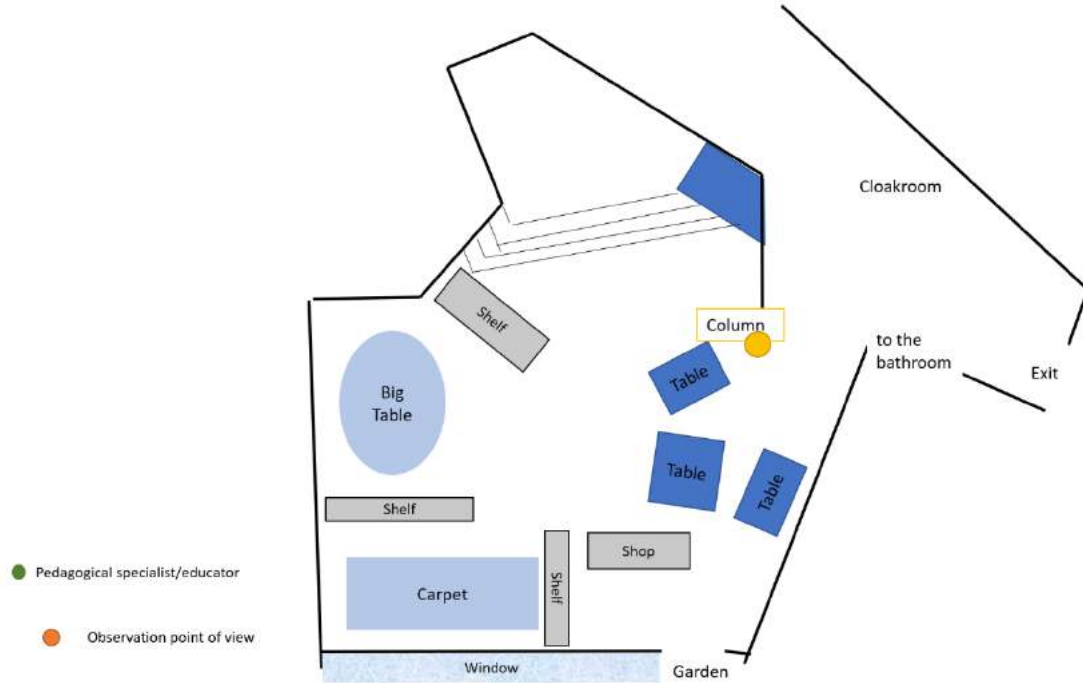
## Analysis of movement patterns



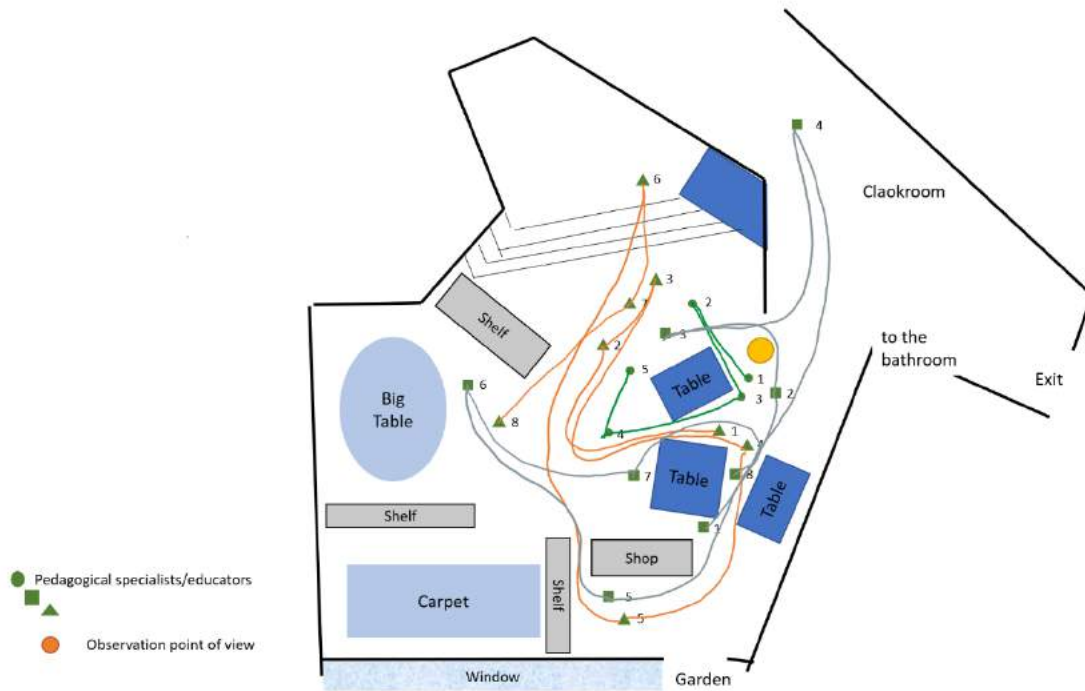
# ROLE PLAY ROOM

Observation period: 09:46-10:00, free play time




Drawn floor plan for observation



Movement pattern educators



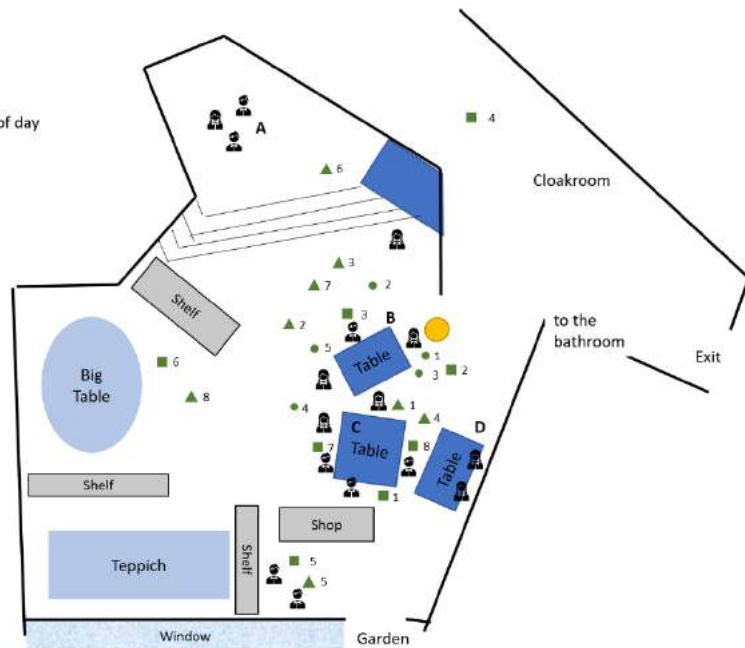
## Activities of the educators and interaction with children

Activity		Timeline	
Educator 			
1	Assistance with handicrafts, observation of the whole group	1	09:46
2	Checking	2	09:50
3	Asking questions, addressing the topic	3	09:53
4	Clean up, guide clean up	4	09:53 30sec.
5	Guide tidying up, finish handicrafts & Consultation with colleague	5	09:54
Educator 			
1	Capture situation	1	09:50
2	Observe	2	09:50 20sec.
3	Asking questions, addressing the topic	3	09:51
4	Listen, ask questions	4	09:52
5	Consultation with colleague	5	09:58
6	Mediate, comfort	6	09:58 40sec.
7	Observe	7	09:59
8	Keeping an overview	8	09:59 30sec
Educator 			
1	Record situation	1	09:54
2	Consultation with colleague	2	09:55
3	Check	3	09:56
4	Fetch something	4	09:57
5	Consultation with colleague	5	09:58
6	Ensure calm	6	09:58 40sec.
7	Admire	7	09:59
8	Support cleaning up	8	09:59 30sec

## Children activities

- A Family play, activities according to time of day
- B Plugging and dice games
- C Kneading
- D Painting and observing

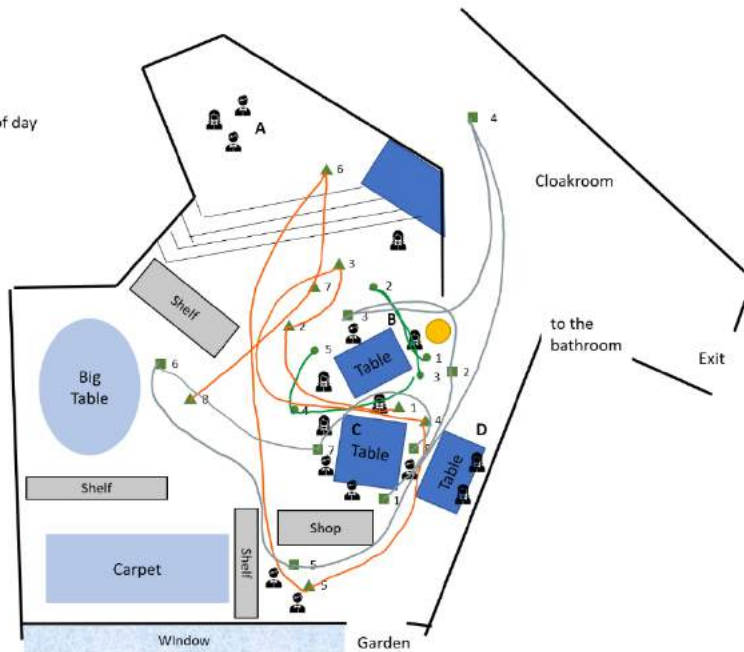
- Pedagogical specialists/educators
- ▲ Observation point of view



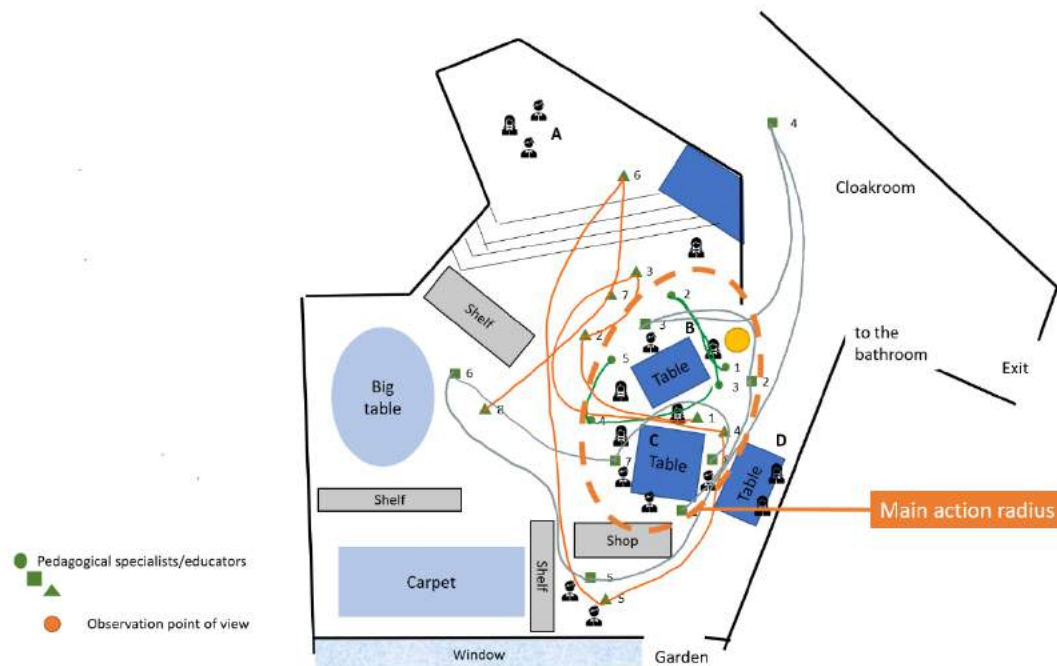
## Combination: movement patterns of the educator & activities of the children

- A Family play, activities according to time of day
- B Plugging and dice games
- C Kneading
- D Painting and observing

- Pedagogical specialists/educators
- ▲ Observation point of view
- Observation point of view



## Analysis of movement patterns



## Discussion with the pedagogical team on cartographic observation

Based on the sketches, the pedagogical staff noticed that the movement possibilities of the educator are conditioned by the furniture and the equipment of the room. This can be constricting or invigorating. 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 specialist 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 different use of the rooms by girls and boys becomes clear in the sketches. This is obviously related to the design, equipment and color scheme of the rooms. In the creative room, the boys' handicrafts must be supported more than those of the girls. In particular, the boys must be motivated not only to make an object, but also to design it, i.e., to color it and decorate it. The girls, on the other hand, design with colors right from the start.

In the construction room, boys and girls build and construct on a large scale. Here, it is important to the children that the pedagogical staff can see what they have built and that what they have built can remain standing for a longer period of time. Different activities of the boys and girls can be observed with regard to sorting and tidying up. Boys and girls all need motivation from the educator to clean up, but the girls stay longer and turn sorting and cleaning up into a play opportunity on their own. Very similar situations and interactions can be observed in the number room.

Up to three pedagogical specialists were present in the role play room during the observation period. This had a lasting effect on the interactions. On the one hand, there was increased consultation among the educators and on the other hand, the children were able to turn to the closer (i.e., spatially closer) pedagogical specialist in each case.



The spatial structure of the mapped rooms hardly differed in architectural terms; each room offered corners and niches at different levels for the children. Due to the special, heptagonal room cuts, a second level and a very high gallery are integrated in each room. As a result, the children find plenty of space to retreat to for their play ideas. The educators have the task of observation. Therefore, all observed pedagogical specialists look for a central place in the room in order to have the whole room in view.

Based on the cartographic observation, the pedagogical team makes the decision to deal with the activity of observation in a further workshop.