

Gender-specific use of space in the kindergarten Tool: Cartographic Observation

Context:

Pre-School location	German-language kindergarten Oswald von
	Wolkenstein Seis, South Tyrol Italy
Details about students	Age: 2 to 7 years
	70 children (3 groups), 11 pedagogical staff (with part- time staff)
	Inclusive kindergarten with the concept of the opening
School premises	approx. 250 sqm, built in 1976, renovation planned.
	The ground floor and the 1st floor are used in the day-
	to-day running of the kindergarten. On the ground floor
	there are three group rooms, a movement room,
	kitchen and dining area. On the first floor, studios have
	been set up in a former flat.
	The kindergarten building is part of a larger structure
	that is used for cultural purposes by the community.
School context:	Rural character; everyday language: German
Type of activity	Workshops with the participation of the pedagogical
	team and two children's groups
Stage in design process	in use reflection/POE



Tool: Cartographic Observation

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

The instrument is presented in a workshop and tried out with the educational staff. Following the testing of the Diamond Ranking instrument (see Case Study: Arriving & Entering: Entrance Situations in the Kindergarten), the pedagogical team determines the observation assignment for the cartographic observation test.

Dates of implementation:

- in October 2021 with pedagogical specialists
- March 2022 Discussion of results with the pedagogical staff





Rationale for activity and tool adopted

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 Seis 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 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 Seis, there are three rooms on the ground floor with correspondingly different thematic focuses:

- Blue room: mathematics, building & construction
- Red room: role play, media, language
- Yellow room: Writing & letter workshop, exercises of daily life, cosmic education, laying

On the upper floor there is a studio for artistic design and a workshop for woodwork and experimentation.

The pedagogical concept of the opening 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 Seis kindergarten, the pedagogical team asks itself whether there are visible and thus obvious differences in the children's use of space. In particular, the differences between the girls' and boys' use of space is of interest.

Case study description: Process

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

In a preparatory meeting with the kindergarten management and a representative of the kindergarten district, 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: Arriving & Entering: Entrance Situations in the Kindergarten), the pedagogical staff found that girls and boys assess the rooms, especially the rooms on the ground floor, differently and use them very differently. This result led to the observation task for testing the instrument of cartographic observation: On the one hand, the movement pattern of the pedagogical staff should be observed, as well as the play activities of the children in the respective room. The red and yellow rooms were chosen for the observation.

The cartographic observations take place one morning during free play time. The cartographic observation was carried out by a member of staff from the CoReD project. In the afternoon, the first observation impressions were discussed with the pedagogical team. This led to the idea of changing the design of the red room. The room is to be designed more clearly, i.e. individual shelf elements are to be removed and the abundance of materials is to be reduced. The decision on which materials to reduce is first made by the expert for the room and then she observes the children's reactions.

${\bf photo}^*\ {\bf documentation:}\ {\bf rooms}\ {\bf of}\ {\bf the}\ {\bf cartographic}\ {\bf observation}$

red room









yellow room





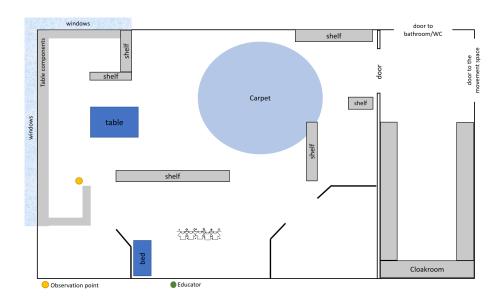
^{* ©} Stadler-Altmann

Case study: Outcome

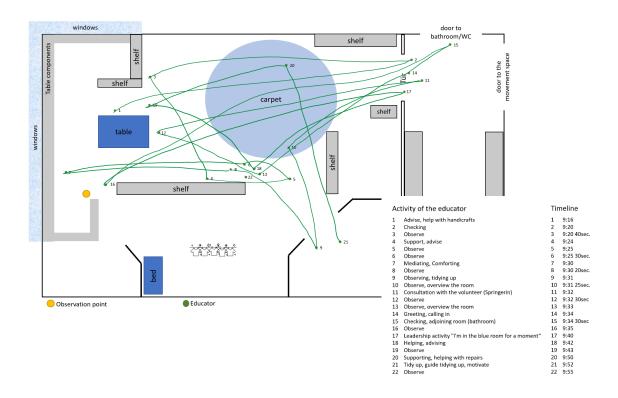
Monitoring protocol red room

Observation time: 9:16 - 10:00, free play time

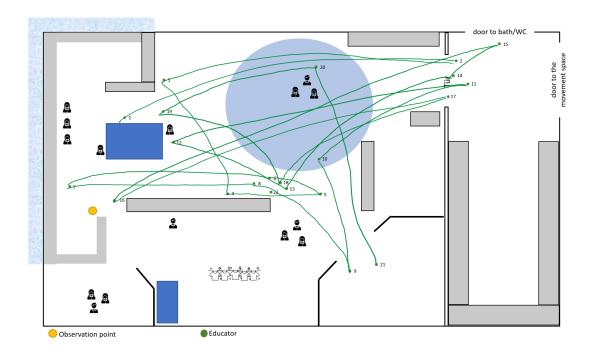
Floor plan



Movement pattern educator



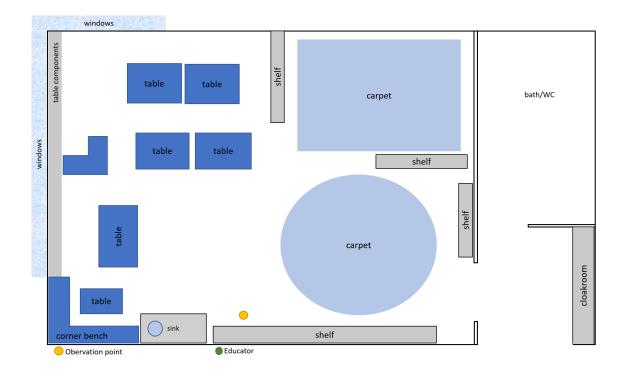
Combination: Educators' movement patterns & children's activities



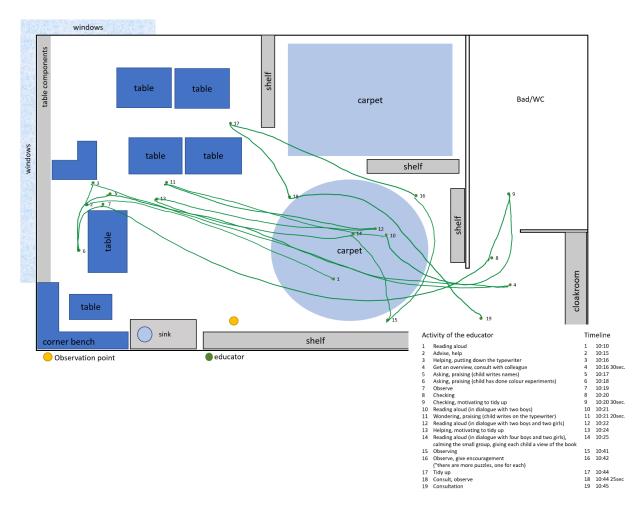
Monitoring protocol yellow room

Observation time: 10:10 - 10:45, free play time

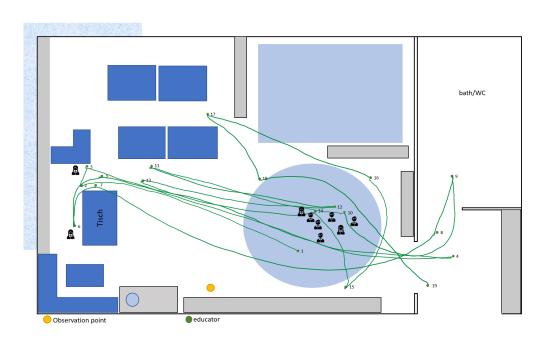
Floor plan



Educator's movement patterns



Combination: Movement patterns of the educator & activities of the children



Discussion with the pedagogical team on cartographic observation

On the basis of 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 may have a constricting or an invigorating effect. However, the room design itself is only one aspect; the activity of the children in the room is much more important. In the kindergarten and in the situation of free play time, it is essential for the pedagogical staff to observe and accompany the children's activities and to participate in the children's activities if the children wish to do so. 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.

In the yellow room, there is no difference in the use of the room by girls and boys. Overall, there are more boys than girls in this room during the observation. Girls and boys feel addressed by the teacher reading aloud in dialogue. The selection of the picture books that are read aloud is done once by the boys and once by the girls.

The spatial structure of the mapped rooms differs clearly. In contrast to the yellow room, the red room appears crowded. The pedagogical staff notice this when looking at the floor plan. However, the thematic focus of the room must also be put in relation to this. In the red room, more and very different materials are needed for role play, whereas in the yellow room, the prepared environment is structured by the experiment trays and the order of the materials (books, puzzles, etc.).

Based on the cartographic observation, the pedagogical team makes the decision to redesign the red room a little: the material is to be reduced and free-standing shelves are to be removed. This change in the room design is to be observed and, in particular, the children's reaction to this new room design is to be observed.