CoReD
Collaborative Redesign with schools

Cartographic observation

Description of Tool

Why observe the use of the classroom?

Class observation is a main instrument for understanding teaching and learning processes in schools when the results of observations are analysed and reflected on the basis of the theory of teaching and learning (cf. Helmke 2012; Meyer 2010).

The questions are useful for classroom observation in the connection between space, teaching and learning:

- How do teachers use space for teaching?

(cf. Stadler-Altmann 2015, 2018, 2019)

- How do pupils use their rooms for learning?

(see Waldner 2018; Stadler-Altmann 2013)

Mapping and description of the use of the classroom

The aim of combining mapping and description is to analyse the impact of the existing learning space on the practice and activities of teachers and students.

Tool instruction

Based on the floor plan of a classroom, the observation of the use of the classroom is mapped: the movement of teachers and pupils is drawn and notes of the action/interaction at the different positions are added (Fig. 1):
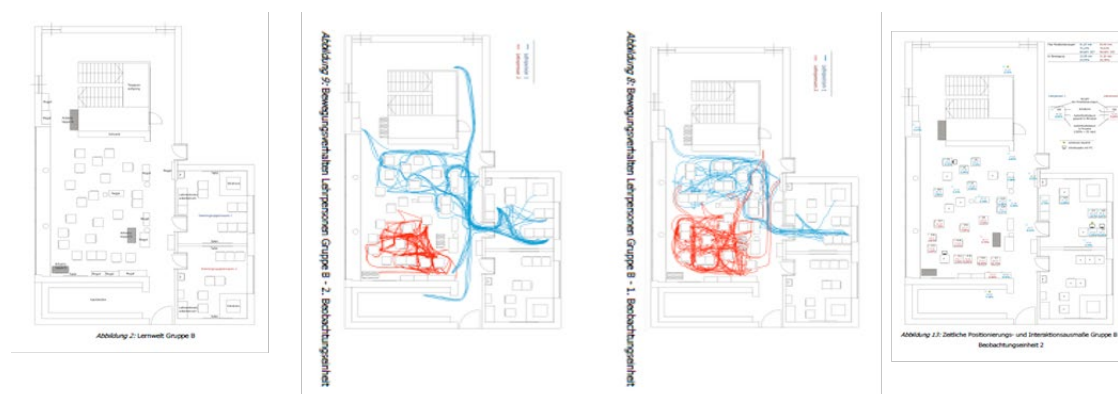
(© Waldner 2018)

In addition to the movement of the teachers and pupils in the room, the time spent at the positions in the classroom should also be recorded. For this purpose, the use of a timer is recommended. In the above example, ZEI, a cube for time recording from "Timeular" was used. With the appropriate software, the time periods can be recorded in minutes and seconds. In the floor plan above, the sum of the positioning or interactions is indicated both chronometrically and as a percentage.

Analyzing the Tool

For a simple analysis, the movement pattern of the people in the room can be discussed in the team. It is important to keep in mind the interaction patterns as well as the spatial conditions.

A "cluster of activities" is used to structure the interaction (Horne Martin 2002, p. 142):

(1) Introduction: Start of the teaching-learning sequence

(2) Teacher-centred teaching phases: e.g. teacher lecture, introduction to a topic

(3) Pupils in their task: individual, partner and team work

(4) Transition: activities between work phases

(5) Completion: final phase of the teaching-learning sequence
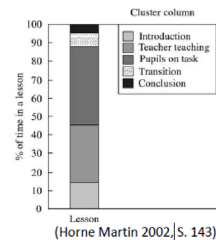
The interactions are entered into the map of the room, numbered and their temporal duration is recorded. The movement profiles can then be summarised as a vertical bar chart d (Fig. 2) and the percentage of activities in a cluster column (Fig. 3).

Fig. 2: Lesson's profile
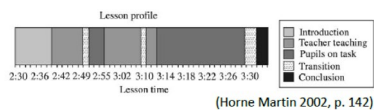
(Horne Martin 2002, p. 142)
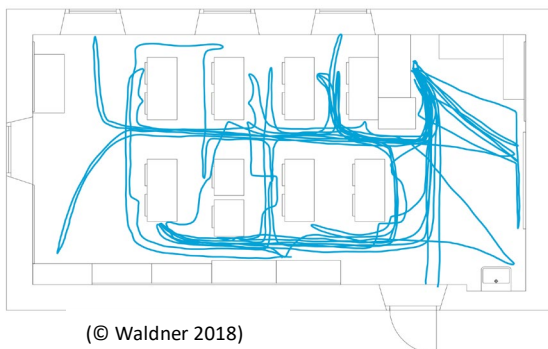
Fig. 3: Cluster column

(Horne Martin 2002, S. 143)

Additional resources

Stadler-Altmann, U. (2015), The Influence of School and Classroom Space on Education, in: C. Rubie-Davies, J. M. Stephens, & P. Watson (Eds.), The Routledge International Handbook of Social Psychology of the Classroom, London: Routledge, p. 252-262.

Stadler-Altmann, U. (2016), Gebaute Umgebung als Lernumgebung. Haben Schulgebäude und Klassenzimmer Einfluss auf Lehren und Lernen?, in: dies. (Hrsg.), Lernumgebungen. Erziehungswissenschaftliche Perspektiven auf Schulgebäude und Klassenzimmer, Opladen, Berlin, Toronto: Barbara Budrich, S. 49-68.

Waldner, A. (2018), Lehren und Lernen im Spannungsverhältnis von Klassenraumgestaltung, Lehrpersonen, Schülerinnen und Schülern, Master-Thesis: Brixen.

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