

Educating Teachers in Spatial Competences

A pilot project concerning a new education for teachers in Denmark

Tool: Diamond Ranking

Context

School location	Three public schools in Aarhus, Denmark The local after school organisation in Aarhus, Denmark Representatives from Aarhus Municipality, the Educational Department A representative from the Danish organisation DCUM (Danish Centre for Educational Environment)
Details about students	All adults. 7 teachers from three different public schools (K-10) and the local after school organisation, a project manager from the municipality of Aarhus, Educational Department and a project manager from the Danish organisation DCUM (Danish Centre for Educational Environment).
School premises	The participants work in very different school contexts – two schools are quite new (built 2008 and 2016), one is old (built 1921). Two are located in the outskirts of Aarhus, one in the centre. And finally, two of the participants move between all schools in Aarhus (after school organisation).
School context	New education 'Rumvejleder' for teachers, where they learn about the relationship between the physical space, pedagogy, and indoor climate.
Type of activity	A workshop where the general relationship between the physical space and different learning activities was discussed.
Stage in design process:	Not relating to a particular stage, but some participants were in a stage before design, while others used it for in use reflections.

Tool used: Diamond Ranking

<https://www.ncl.ac.uk/cored/tools/diamond-ranking/>

Rationale for activity and tool adopted

The Diamond Ranking tool was used as part of a pilot project, where a new teaching program for graduated teachers was being tested. The aim of this teaching program is to provide teachers with knowledge and tools regarding the interplay between space, pedagogy, behaviour, and indoor climate and through this gain the competences to start up new spatial projects with colleagues and students at their schools, respectively. The tool was tried out as a means for making teachers reflect upon and discuss different aspects of their learning environments. Following the use of the tool, the teachers went home to their schools and made a redesign project as part of the teaching program. The projects were as follows:

- Redesign of a classroom and a library space (school from 1921) – picture 1 from left
- Redesign of a common area between two classrooms (school from 2016) – picture 2 from left
- Redesign of a classroom for primary students with special needs (school from 2008)
- A book with guidelines and examples for the design of after school clubs – picture 3 bottom

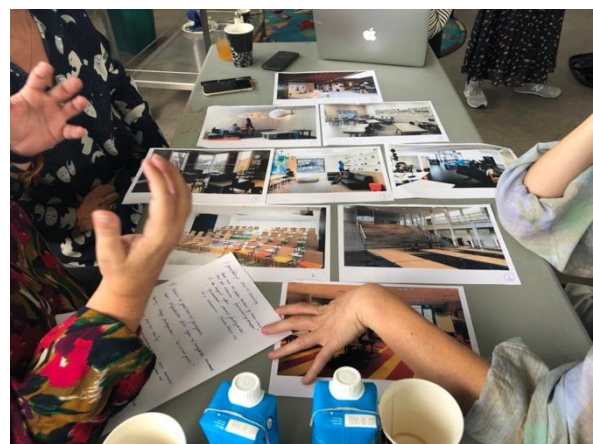


Case study description: Process

Seven teachers from three different schools and the local after school organisation as well as a project manager from the municipality of Aarhus, Educational Department, and a project manager from the Danish organisation DCUM (Danish Centre for Educational Environment) participated in the trialling. It took place in the library of one of the participating schools. The participants were divided into three groups. Each group was given a set of 9 photos of random school environments that were selected for their variety in size, openness, and flexibility. All groups had the same photos. They were asked to discuss and arrange the photos based on three questions (each at a time):

1. What is a good/bad space for instruction?
2. What is a good/bad space for concentration?
3. What is a good/bad space for learning?

The questions were formulated in relation to a previous lecture on space and education. In between each question, they were told to make notes and take pictures of the diamonds.



Case study description: Outcomes

We experienced Diamond Ranking as an excellent tool to open discussions concerning the learning environments that helped the participants become aware of individual understandings of concepts like learning, individual preferences, and spatial qualities. The tool was easy to use and can be used with random photos or using photos from the context in question. The three questions helped to qualify the discussions by relating to shared knowledge given in the previous lecture. It also enhanced the understanding and discussion on how different learning processes and stages in the learning processes may demand different design settings.

The teachers from one of the schools have since used the tool in their own school during an internal meeting as part of their redesign project with great success. 60-70 participants, both teachers and school management, participated in this workshop. The event was performed online due to Covid but with physical photos. All participants received a set of photos with different interior settings which they were told to cut and arranged according to three questions: What is a good/bad place for 1) instruction, 2) concentration, 3) evaluation. They were divided into groups of 5, which changed after each question. At first, they ranked the photos individually and then they shared their diamonds in the group. They later told us that they experienced the tool to be very usable – it was easy to use, it involved all teachers and school management in the design process and the ‘results’ from the workshop was used to redesign two areas in the school: the library and a pilot classroom. The tool opened for understandings of individual preferences and learning styles and made the participants aware of where they liked to work.

