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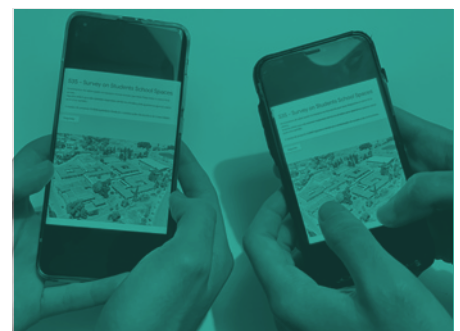
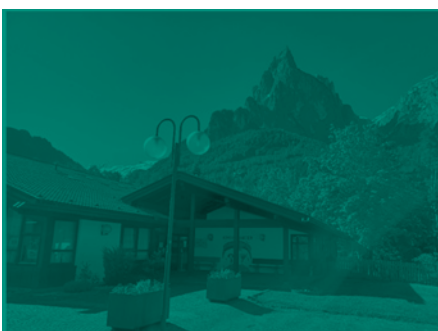
CoReD



Collaborative
Redesign
with schools

CoReD Principle 3:

Facilitate the exploration of ideas and possibilities





Space matters for Education

Physical space and material resources, both what you have and how it is organised, make a significant difference to the processes and products of learning and teaching. Research conducted over the last half century in many different countries and multiple educational settings, has shown the impact of the physical learning environment (Higgins et al., 2004; Byers et al., 2018) and encourages the funders and users of educational infrastructure to try to improve their premises and resources (Blackmore et al., 2011; Duthilleul et al., 2021).



But no learning environment, however ‘innovative’, is a magic bullet. Just as was seen with developments in IT at the end of the 20th century (Cuban, 2001), equipment only gets teachers and students so far. Across all types of educational resources, both physical and digital, the key to success is achieving a match between what you have and what you want (and are able) to do with it. The fundamental importance of this relationship between design and use is the take-home message from numerous attempts at innovative school design in the past (such as ‘open plan’ schools in the 1960s and 70s) and the present (ILEs in Australia and New Zealand; building for personalised learning in Iceland; schools for the new core curriculum in Finland).

To align the design and use of educational settings, we can look to key ideas developed through participatory user-centred design, which concur with knowledge about educational change: **people need to work together**. Collaboration is central to develop shared understandings of educational values and goals; of the processes and activities needed to achieve these; and of the choice and arrangement of physical resources and spaces that these activities require.

Such collaborations will be different every time, with many local decisions to be made: who should be included in the collaboration (school students? Teachers? Other school staff? School leaders? Municipal decision makers?). When should different groups or their representatives be included? What funding (if any) is available to change the premises? What is the timescale of the change process?

There are, however, some consistencies across participatory processes. Collaboration takes time, and it can be hard to know how to approach discussions about school space with people who see it from the perspective of users, rather than as planners or designers. This is where the CoReD tools come in, presented through our guides, which cover each of four principles for facilitating successful collaborative engagement about school space (Woolner, 2018).

**Collaboration
is central to
develop shared
understandings
of educational
values and goals**

This guide is to help you to...

1. Start where people are (mentally and physically);
2. Understand the intertwining of physical, organisational and social aspects of school environments;
- 3. Facilitate the exploration of ideas and possibilities;**
4. Appreciate the complex, lengthy process that is change.

Facilitating the exploration of ideas and possibilities ...

When school communities decide to make changes to their premises it is often because some parts aren't working well. Also, whatever the original motivation for the discussion, when users first get together to talk about their space there can be a tendency to focus on problems and complaints. While it is important to consider what isn't working, it is important to get beyond the fault-finding stage and begin to develop ideas for improving the situation.

Even with everyone trying to be creative and open-minded, however, it is hard for people to imagine school spaces designed or used in ways that they haven't experienced themselves. Architects are well aware of this limitation of user-centred design and often address it by taking people on site visits to provide experiences of other spaces and designs. But such visits, even if possible, are unlikely to involve the whole school community. Therefore, P3 approaches have been developed that can be undertaken by multiple groups, but all centred on creative explorations and feeding participants' imaginations. There are examples of opening minds through discussing images of other school spaces or experiencing existing spaces in imaginative and different ways.

Activities suggested under this Principle, and the CoReD case studies, are all rooted in school communities, their spaces and the things they (try to) do there. But all the examples show ways of developing new ideas, often to inform a planned change, big or small. These activities can also be helpful for continuing professional development through exploring of other ways to do things.

Which tools work best to address P3.?

	UK tool: Diamond Ranking	DK tool: Stories of Educational Spaces	SW tool: Pedagogical Walk-through	ISL tool: School Development Evaluation Tool	PT tool: Survey on Students' School Spaces S3S	IT tool: Cartographic observation
1. Start where people are (mentally and physically)	✓✓	✓	✓			✓
2. Understand the intertwining of physical, organisational and social aspects of school environments			✓✓	✓	✓✓	✓
3. Facilitate the exploration of ideas and possibilities	✓	✓✓			✓	
4. Appreciate the complex, lengthy process that is change				✓✓	✓	✓✓

✓✓ this tool is particularly suitable for school communities focusing on this Principle in light of where they are with their particular change process of design, development and evaluation.

✓ this tool can also be useful for school communities focusing on this Principle.

How can these tools be used?

Stories of Educational Spaces

<https://www.ncl.ac.uk/cored/tools/ses/> is a structured group activity that is designed to enable individual and collective imagination in relation to a school's spaces. Participants work in groups to visit interesting, important or overlooked spots within their schools. There are comprehensive worksheets for participants, included on the webpage, to inspire and support collaborative storytelling. In their groups, participants create stories about how the space is used in the present, how it could have been used in the past and how it might be used in the future, producing written stories and drawings.

The stories from the past can draw on any historic knowledge that the participants might have, but the option of pure storytelling avoids anyone feeling insecure about their lack of knowledge and can enable more creativity. Groups of either school staff or students can use the tool, with a facilitator needed to bring the ideas together, aided by online platforms such as Padlet. Narrating and developing stories of the past, present and future creates opportunities for reflecting on the existing environment and its use, but also for rethinking and coming up with new ideas.

Diamond ranking <https://www.ncl.ac.uk/cored/tools/diamond-ranking/> is a very straightforward tool to use to develop conversations between students, teachers, or other staff through providing images of different spaces to rank and discuss. The use of nine images taken from other schools enables a range of different settings to be considered, enabling participants to think beyond their current building and how it is used. Yet the ranking activity, placing the images according to criteria chosen to fit your project (e.g. 'A good place for concentration'; 'What makes a good outdoor learning space?'), provides sufficient structure for everyone to feel confident with the task. Once the ranking has been completed, discussion can be developed about the particular features of the settings that led to their positioning in the rank. This supports the development of ideas about ways to bring features together to create possible new environments for these participants. The CoReD webpage includes detailed instructions to guide your use of the tool and also, to provide you with pictures of school space, there are image libraries, of learning and other spaces, indoors and outdoors, and for younger and older learners.



Although **Survey on Students' School Spaces (S3S)** <https://www.ncl.ac.uk/cored/tools/school-spaces/> begins with a survey of users' experiences of the existing school, the focus groups conducted in the school spaces can support students to think about new ways to use these spaces or ways in which they can be altered to align better with current use. Similarly, the **Pedagogical Walk-Through** <https://www.ncl.ac.uk/cored/tools/walk-through/> has also been found to generate discussions by school staff of possibilities and new ways of working.

Each tool has a webpage where you can find detailed instructions, and sometimes other resources, in all the languages of CoReD.

Case study examples from the CoReD project

Sharing stories of hidden and valued spaces in Nørre Fælled Skole, Copenhagen, Denmark



This school of 470 students, aged 6 –16 years, is housed in a red brick building designed by the city architect and erected in 1932. There have been several later extensions and the school is in the middle of a renovation. Although this is particularly focused on installing a new ventilation system, there will be refurbishment of selected areas in the school and building of a new gym.

To inform this process, a workshop was organised, centring on the SES tool, intended to enable the school's history and users' experiences to feed into renovation plans. The participants were four students from year 6, three teachers involved in the renovation, the school leader and a municipal employee assigned to help mainly with practical tasks during the reconstruction process. The participants worked in four pairs, of one adult and one student. Each

pair chose and visited 1-3 places at the school, describing for each place the present use of the spaces and narrating or

imagining stories of their use in the past and in the future. The teams' photos and short descriptions of the imagined and/or real past, present and future uses were uploaded to a shared Padlet-page. A large screen showing the shared Padlet was then used with the whole group back in the meeting room. Each pair presented their work, elaborated and reflected on their text and pictures with some of the groups reading aloud the small stories they had composed imagining events in the past and in the future.

The workshop framed conversations between adults and students about school spaces, but also aspects of schooling in general. The historical knowledge sharing and storytelling seemed to be based on a shared attachment to the place. Wishes and visions for the future were clearly inspired by the process of the storytelling about the past and present. This inspiration centred on the need for green areas and trees as well as for cosy and quiet spaces. In addition, criticisms of underused areas were a catalyst for rethinking and considering possibilities for redesign.



Generating ideas for a neglected outdoor space at George Stephenson School, near Newcastle, UK

This British secondary school has approximately 1200 students, aged 11-18. Their premises date from the 1970s and is comprised of several 'blocks', devoted to different areas of the curriculum, some of which are freestanding buildings. The art block is one such building, surrounded by neglected and overgrown outdoor space. The

Design Technology lead teacher and technician would like to use some of this space to create an outdoor learning area for students studying art and design subjects.

Diamond ranking with images of outdoor spaces, that were chosen from the CoReD webpage, was used with Year 7 students (11-12 years),

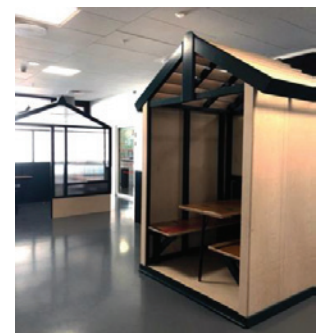
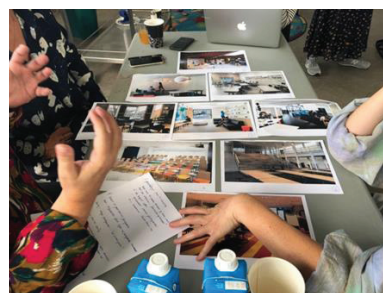


answering the question, 'What makes a good outdoor learning space?' The activity was easily completed and generated discussion, both about outdoor spaces and the process of completing the ranking. One student commented, "Most of them [the pictures] looked good but then you noticed some detail that completely changed your opinion". Having been supported to have these discussions and, in the process, shown some outdoor areas and features that they might not have otherwise considered, students were able to produce designs for the outdoor space.



Diamond ranking for professional development of Danish teachers' spatial competencies

A municipal initiative is underway in Copenhagen to stimulate professional learning about school design and use. As part of this programme, seven teachers from three different schools and the local after school organisation joined a municipal project manager to complete Diamond Rankings of generic photos of (Nordic) school spaces. In groups, the participants ranked the same set of images as good or bad for, 'Instruction', 'Concentration' and 'Learning'. The tool worked well to develop discussions between practitioners working in different schools and with some differences in role. Using ideas generated during the session, participants went on to initiate small redesign projects in their schools. In addition, teachers from one school have since used the activity with teachers and managers in their school specifically to inform a redesign of the library and a classroom.



Further information – available for free download

This article explains how Diamond Ranking was used with staff from a school in England and a nursery in Uruguay as part of a series of collaborative activities to generate ideas for redesigning their settings:

<https://doi.org/10.3390/buildings11110496> (Woolner, P. and Cardellino, P., Crossing Contexts: Applying a System for Collaborative Investigation of School Space to Inform Design Decisions in Contrasting Settings. *Buildings* 2021,11, 496.)

This thesis describes participatory design workshops, and the activities used to stimulate imagination (p.171-194), with Danish school students:

<https://adk.elsevierpure.com/en/publications/unlocking-learning-spaces-an-examination-of-the-interplay-between> (Bøjer, B. (2019). *Unlocking Learning Spaces: An examination of the interplay between the design of learning spaces and pedagogical practices*)

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