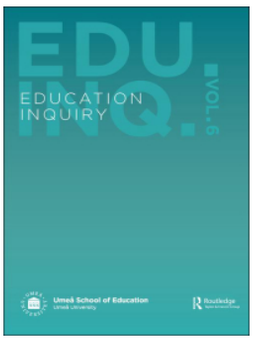

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ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/zedu20

# Transitions in Nordic school environments – an introduction

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**To cite this article:** Anneli Frelin, Jan Grannäs & Maria Rönnlund (2021) Transitions in Nordic school environments – an introduction, Education Inquiry, 12:3, 217-224, DOI: 10.1080/20004508.2021.1947625

**To link to this article:** https://doi.org/10.1080/20004508.2021.1947625



Published online: 05 Jul 2021.

EDUCATION INQUIRY
2021, VOL. 12, NO. 3, 217–224
https://doi.org/10.1080/20004508.2021.1947625

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EDITORIAL



# Transitions in Nordic school environments – an introduction

In the Nordic countries, with their longstanding tradition of valuing education for the masses, a large number of schools have been built over a more than century-long period and therefore represent a variety of pedagogical and architectonical ideals (Bengtsson, 2011). For example, the school landscape represents traditional and progressive ideals and in terms of the buildings themselves, those that are currently considered as highly innovative exist in parallel with more traditional schools from earlier decades. However, a school design that was considered radical at the time of its construction may be considered old-fashioned and unfit for purpose today. Despite the importance of school buildings for education, research-based knowledge about them is limited, especially in educational research and in the Nordic countries. At present, such research is mostly conducted and published in the Australian, UK and US contexts. The special issue of this journal addresses this knowledge gap by focusing on the relations between educational practices and school environments in the Nordic countries and highlighting the intentions, complexities and negotiations relating to the design, building and use of schools at different levels.

## A growing research field

Research on school buildings and environments is a growing and multidisciplinary field and involves scholars from several different disciplines. This has become apparent at research conferences. Educational researchers have enriched this research field with perspectives that are not usually addressed in other disciplines, such as architecture or environmental psychology. For example, in history of education school design and architecture have been studied for their temporal and societal contexts and the kinds of citizens they aim to foster (Burke & Grosvenor, 2008; Darian-Smith & Willis, 2016; Grosvenor & Rosén Rasmussen, 2018). The multidisciplinary nature of the research field is also expressed in individual projects, in which researchers with different backgrounds collaborate. Such examples of projects from the Swedish context include: one on the role of physical space for learning (Alerby, Bengtsson, Bjurström, Hörnqvist, & Kroksmark, 2006), another on learning spaces from the perspectives of architecture, design, lighting design, school planning and special education (de Laval, 2017), the third on a post-occupancy evaluation of school buildings (de Laval, Frelin, & Grannäs, 2019) and the fourth a comparative research study of two newly built schools characterised as innovative learning environments (Frelin & Grannäs, n.d.).

Various themes can be discerned in the research field. One theme is policy processes relating to transitions into new learning environments (e.g. Charteris & Smardon, 2018; Mulcahy, 2015; Mulcahy, Cleveland, & Aberton, 2015; Wood, 2018). Another theme is participatory design processes, which covers participation at the local school and in

relation to the wider community (Frelin & Grannäs, n.d.; Sigurðardóttir & Hjartarson, 2011, 2016; Woolner, 2018; Woolner, Hall, Wall, & Dennison, 2007). A third theme is school architecture and design (e.g. Bengtsson, 2011; Bjurström, 2004; Bøjer, 2019; Cleveland & Fisher, 2014; Dovey & Fisher, 2014; Kirkeby, 2006; Sigurðardóttir & Hjartarson, 2018). Yet another theme is the transition process into a new school building from the design- to post-occupancy phase (e.g. Alterator & Deed, 2018; Blackmore, Bateman, Loughlin, O'Mara, & Aranda, 2011; Daniels, Tse, Stables, & Cox, 2017; Gislason, 2018; Sigurðardóttir & Hjartarson, 2016; Woolner, Thomas, & Tiplady, 2018).

Another recent and more empirical focus is on transitions from pedagogical practices in traditional classrooms with rows of desks facing the front, to new kinds of learning environments with names like new generation, flexible or innovative (e.g. Alterator & Deed, 2018; Mahat, Bradbeer, Byers, & Imms, 2018; Woodman, 2016). In general, and as summarised by Bøjer (2019), these learning environments contain fewer or smaller classroom type spaces and instead have larger, open, flexible or activity-based spaces (Dovey & Fisher, 2014; Grannäs & Stavem, this issue).

Several studies have examined the relation between the built environment and student learning by looking at how the relationship between the material and non-material is constituted (e.g. Barrett, Davies, Zhang, & Barrett, 2015; Blackmore, Bateman, Loughlin, O'Mara, & Aranda, 2011; Byers, Imms, & Hartnell-Young, 2018; Freeman et al., 2014; Woolner et al., 2007). It has been proved that multi-functional, technology-enhanced higher education classrooms, where students and teachers can engage in presentations, communicate and use digital resources, stimulate learning and improve examination results (e.g. Nordquist & Fisher, 2018). The same can be said for multi-functional innovative learning environments that offer variation and differentiation in the teaching and learning (Frelin & Grannäs, 2020). These kinds of learning environments are also time-efficient, in that students and teachers do not have to spend time moving between different spaces for teacher instruction and group work (Lundahl, Gruffman-Cruse, Malmros, Sundbaum, & Tieva, 2017). Research on the relation between learning spaces and pedagogical practices also addresses the control and management of students (Mulcahy et al., 2015; Sigurðardóttir & Hjartarson, 2016) and how material conditions shape differences in the educational system (Isling Poromaa, 2016).

## The special issue – a Nordic collaboration

School environments are planned and designed by stakeholders, but are also occupied and appropriated by their users who interactively respond to and use the environment in different ways. The space and its educational practices, including the social relations that are played out there, inform and influence each other (Boys, 2011; McGregor, 2004). All the contributions in this special issue take this interplay as their starting point and more or less visibly draw on a relationalist understanding of space in their analyses.

A relationalist understanding of space challenges the idea of space as fixed and absolute and instead views it as "open, multiple and relational, unfinished and always becoming" (Massey, 2005, p. 59) (see also Boys, 2011; Mulcahy et al., 2015). Space does not inherently have an essence or agency. As a consequence, space cannot have a direct

impact on pedagogic practices. The "acting" of space or what space "does" is rather an effect of particular relations and interactions (Mulcahy et al., 2015, see also the theory of agential realism in Rosén Rasmussen, this issue, in which discourse together with space and materiality is ascribed an active role). The authors share the assumption that there is a need to regard the school environment as "part of the life story of its users" (Stables, 2015). Thus, we understand the relationships between space and occupations/actions/pedagogical practices as intersecting, complex and partially related processes (Boys, 2011, p. 53).

This special issue is the result of a network project entitled *From design to practice. School environments from a Nordic perspective*[1] in which researchers from the Nordic countries worked in close collaboration with colleagues from Great Britain, Italy and Portugal from the multidisciplinary research network DRAPES (Design, Research and Practice in Educational Spaces). The purpose of the DRAPES network has been to widen our common knowledge and initiate cross-national discussions and collaborations. In the Nordic project, three network meetings have been held, each with a different theme and including guest lectures, workshops, text production and visits to historic and innovative school buildings in three different countries.

The first theme in the network meetings was *From past to future – the temporal dimension*. Here the aim was to examine school design and learning environments over time, consider what could be learned from them, how they have developed and the kinds of changes that have taken place in educational ideology and policy. The second theme was *From design to educational practice – the spatial dimension*. Here, the physical environment in schools was discussed as a potential factor for supporting educational change and the changing of traditional school designs to better fit the need for learning environments that facilitate work aimed at improving students' learning and preventing social exclusion. In the final network meeting the focus was primarily on text production. The special issue is one of the results of this process.

The Nordic dimension is a common thread throughout the themes. The Nordic educational systems are top ranked internationally and include compulsory schools (a 9–10-year long education) followed by upper secondary education (a 3-year education). The Nordic model of education is based on the vision of a free, common, inclusive and compulsory school for all students. The development of welfare in the Nordic countries during the 20th century created the opportunity for and a vision of a *School for All* (Blossing, Imsen, & Moos, 2014). This comprehensive welfare initiative resulted in a large number of schools representing a variety of pedagogical and architectonical ideals being built in the Nordic countries over time. In all the Nordic countries, interesting and innovative designs of school buildings are now evident (e.g in the case of Iceland, see Sigurðardóttir & Hjartarson, 2018a).

## Transitions in time and space

*Transition* is a common theme in the articles. Transitions can be viewed in a multitude of ways. In order to provide a frame for these transitions (see Table 1), we have distinguished between the objects of study in relation to different *spatial scales* (e.g. global, national, regional, municipal, school level), *temporal scales* (e.g. past, present, future school environments, long-term/short-term perspectives), *physical environments*

**Table 1.** A frame for transitions in school environments.

| | Objects of study |
|---|---|
| Spatial scales | Global – National – Regional – Local/municipal – School – Individual – etc. |
| Temporal scales | Past – Present – Future, Long-term – Short-term – etc. |
| Physical environments | Old/renovated/new structures – Traditional/innovative – etc. |
| Pedagogical approaches | Traditional/progressive – Teacher/student centred – Active – Artefacts and/or technologies etc. |
| Perspectives | Teacher – Student – Head Teacher – Architect – Builder – Policymaker – etc. |

**Table 2.** An overview of the articles in relation to the frame for transitions in school environments.

| Article | Rosén Rasmussen (Denmark) | Rönnlund, Bergström and Tieva (Sweden) | Grannäs and Stavem (Norway) | Niemi (Finland) |
|---|---|---|---|---|
| Spatial scales | School level – national and global influences | Local level – in a global and national context | School level – in a national and local context | School level – in a national context |
| Temporal scales | Past – 1970s – early 1980s | Present – future aims | Past – 2010s | Present |
| Physical environments | Open and flexible learning environment | Open learning environment | Traditional and innovative learning environment | Open learning environment transitioning to traditional |
| Pedagogical approaches | Transitioning to more progressive | Progressive, student centred | Traditional and progressive | Traditional and progressive |
| Perspectives | Teachers | Head teachers, school planners and developers, architects | Design briefs | Teachers |

(e.g. traditional, innovative), *pedagogical approaches* (e.g. student/teacher centred, "active learning") and *perspectives* (e.g. teacher, student, head teacher, architect, builder, policymaker perspectives). By presenting case studies from various Nordic contexts dealing with the transitions in these varying dimensions, the intention is to consolidate insights into the changing ideas and practices of school environments and their dynamics.

The contributors to this special issue, all of whom represent Nordic countries (Denmark, Finland, Norway and Sweden) address the perceptions, practices and lived experiences of educational design from the perspectives of teachers, head teachers and other stakeholders at the local level and sometimes in the context of national and international influences. The authors present analyses of school environments that include continuity and change over time (e.g. flows, movements and shifts) and relations across spaces (see Table 2).

Taking this interplay as a starting point, the intention is to present research studies that explore design and policy practices as well as the enactments, transitions and everyday practices relating to school environments.

In the first article, Lisa Rosén Rasmussen addresses schoolteachers' spatial work in the process of inhabiting and establishing a rhythm of everyday schooling in a new

school building. The study focuses on a historic case of a Danish open-plan school built in the early 1970s and shows how the teachers' work connects to the organisation of bodies, sound, furniture and teaching aids. Albeit still entangled in broader political and pedagogical changes, the concrete intra-actions of materiality, pedagogy and people in the new buildings can be seen as producing new understandings and practices of open-plan schooling.

The second article, by Rönnlund, Bergström and Tieva, is a Swedish study of transitions at the level of ideas and representations. More specifically, with the authors show how stakeholders involved in the planning, construction and reconstruction of school buildings at the regional, municipal and local levels represent and imagine a "good" learning environment. They also show how their ideas are positioned in relation to dominant policy discourses on school design in transition from "traditional" to "new" and "innovative".

In the third article, Grannäs and Stavem present a Norwegian study describing the transition of a secondary school building's physical learning environments in two snapshots: one when the school was built and the other 9 years later. When new schools are built, a contemporary design theme is for the learning spaces to be pedagogically and physically flexible enough to facilitate multimodal pedagogies that meet individual learners' needs. Compared to traditional forms of education and school buildings, an innovative learning environment design is considered to correspond more closely to these aspects. However, the results show a mismatch between the architecture and the pedagogical practices and how the architecture was adapted to the pedagogical practice.

In the final article Kreeta Niemi investigates adaptations of teachers who have recently started to work in new and open learning environments. Schools aligning with open learning space design and pedagogy in Finland are being designed at the critical point of time during which renewal of the national curriculum framework and demands for changes of the teaching and learning culture occur simultaneously. Transitions to new learning environments are thus merged with transitions to a new curriculum. Niemi finds that multiple negotiation processes take place, and that the lack of a participatory process in the design phase, justifying the motivation and rationales behind school transformation, hindered adaptation. Niemi also points to the need to ensure that the experiences of the end users of such spaces are taken into account when creating school environments conducive to all.

The special issue ends with a commentary from two influential European researchers in the field of learning environments, Pamela Woolner from Newcastle University in the UK and Ulrike Stadler Altmann from the Free University of Bozen-Bolzano, in Italy's South Tyrol. This Nordic special issue presents both wide and deep research on transitions in school environments and is an important contribution to the growing research field.

## Funding

This work was supported by the Swedish Research Council.

## Note

1. Funded by the Swedish National Research Council 2017-00079/NOS-HS.

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