

**FREE EDITION: CHAPTER 6 ONLY**

# THE CITY AS A CLASSROOM

DESIGNING FOR OUTDOOR LEARNING





arki\_lab ApS - Designing Cities With People  
Birkegade 4, 2200 Copenhagen N, Denmark  
79 Beattie Street, Balmain NSW 2041, Australia  
mail@arkilab.dk  
www.arkilab.dk

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**Contributors:**

- Jeanette Frisk, Architect MAA
- Rasmus Frisk, Architect MAA
- Ekin Arin, BA Architect
- Caroline Moinel, MSc Architect
- Yalda Pilehchian, MSc Urbanism + B.Arch
- Malene Jensen, BA Geologist
- Bodil Ejsing Brødreskift, MSc Ethnologist
- Andreas Mortensen, BA Ethnologist
- Rachel Gilmour, BA Spatial Design
- Tamara Tomanic, BA Spatial Design
- Liang Zhi, BA Spatial Design

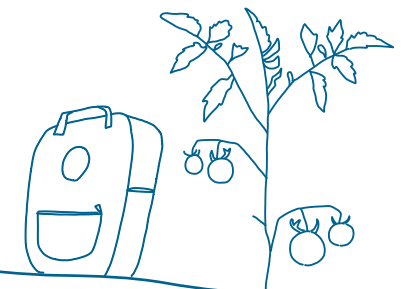
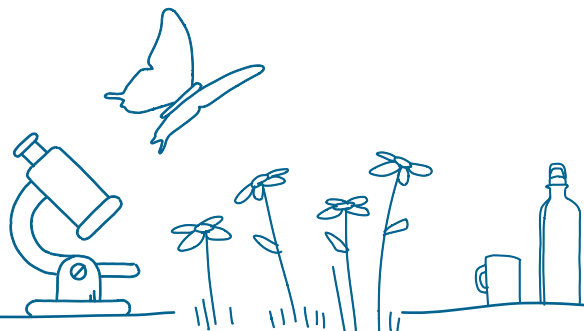
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# INTRODUCTION

This chapter briefly takes you behind the scenes to find out more about how the idea of writing a book on outdoor learning spaces was conceived. The following pages also touch on arki\_lab's approach to outdoor learning and introduce some of the people, who's knowledge serve as the foundation of the book. Lastly, the introduction will walk you through the different chapters and explain the overall structure. Well let's just dive in!



# A good room for learning

Education has always been a part of humanity, from storytelling in pre-literate societies to the first formal schools in Egypt and Mesopotamia. Today's technologically equipped classrooms look a little bit different than those of 3000 BCE Egypt. Education has undergone numerous transformations since Plato founded the first higher education institution in Athens to today's classrooms, equipped with tablets: regardless of the period, learning spaces and subjects have reflected the society and the world system.

It has become common knowledge that the rapid population growth of the last 20 years is pushing humanity into a scarcity of resources. Historically, great leaps and transformations in the world order have occurred during times of crisis and thus a shift in social organization is currently already underway. Change is happening incrementally as people are searching for alternative ways to do everything. The lack of space in cities is starting to stress not only the real estate market but also public facilities and institutions.

These urban conditions now pose a global challenge and call for innovative, collaborative and inclusive solutions. In 2018 the increased global acceptance and action towards climate change shows small signs of hope. However this awareness has to be ingrained in our societies not just now but also in the future. This, unsurprisingly, starts with the children.

Schools are one of the fundamental places to teach children about values, awareness and perception of their surroundings. They are ideal places to shape children to be aware of, think and act on these global and local challenges.

Humanity has been through extensive transformations throughout history, from drastic changes in the economical system to complete restructuring of social orders. Our knowledge and thus perception, of not only the world but also our species, has immensely broadened since Plato's times. We're always developing and redefining our ideals. Even things that we believed as undisputable are sometimes proven invalid, causing us to constantly question everything. Educational systems aren't immune to this ever evolving stream of knowledge. Hence what we considered an ideal condition for learning might not look the same as the one 50 years ago.

**What constitutes a good room for learning?** This rather abstract question was the starting point of the journey into the field of learning and teaching, outside the conventional classroom. The book covers a wide range of topics in the field of outdoor education, integrating expert knowledge and brilliant insights from different case studies.



# arki\_lab

Designing Cities With People



## arki\_lab

Designing cities with people

At arki\_lab, we are cultural analysts, urban designers, ethnologists, architects and some of us are hybrids who don't really fit into any one category. Our multidisciplinary approach aims to integrate different perspectives in the spatial design field, encouraging discussions, contemplation, new collaborations, and innovative design solutions when developing new urban spaces.

This is the second arki\_lab book, written to share our knowledge and experience with the world. The first book, *Designing Cities with Young People*, focused on the importance of engaging young people in design projects and the resources they bring to the design process. This book, building on the shoulders of the first book, presents a refreshing view on urban spaces and their potential as learning spaces.

This book largely builds on the knowledge accumulated from arki\_lab's long experience working with urban spaces, participatory design strategies, educational institutions and young people.

### Our approach

In the following pages the reader will be introduced to an alternative education model, outside the conventional classroom environment. However the book isn't just an analysis focusing on the benefits and opportunities of outdoor learning. There's already an abundance of existing reports, studies and scientific articles that beyond doubt corroborate the benefits of taking kids outside the classroom. While the research extensively covers the didactics of outdoor education, there's surprisingly little attention given to how the concept relates to the form and reshaping of the physical environment.

Thus the book sails off to address this missing link between learning spaces and their design. This connection is explored through two perspectives. First examining the teaching practices and investigating how design might support them. Secondly from an architectural point, we analyze different design projects in relation to how they support pedagogical and educational goals.



# Special thanks

The arki\_lab team was not alone when writing this book. A lot of great people have contributed in different ways, without which there wouldn't have been a book at all.

Special thanks to **Karen Barfod**, who, with her extensive knowledge on outdoor learning, has laid the foundation of the core notions in this book. Thanks to **Rachel Gilmore, Tamara Tomanic and Liang Zhi**, all students from Roskilde University Center's master programme "Spatial Designs and Society". They've done some great fieldwork and analysis of the children's construction sites and incidental learning.

A special thanks to all the teachers and students who have shared their everyday experiences of outdoor learning practices: **Marie Kaas-Larsen**, her sixth graders from Nørrebro Park School and **Peter Laxdal**, the nature guide at Karlebo Udeskole.

And thanks to all the people who shared their insights and wisdom in the interviews. Thank you, **Karen Barfod, Søren Myrup, Marie Kaas-Larsen, Jens Linnet** and **Karen MacLean!**



# Structure of the book

In order to keep the text light and readable, we haven't included so many references throughout the book. But if there's an argument or reference that piques your interest, you'll find the literature list, divided into chapters, in the back of the book.

The book is divided on 8 chapters, each focusing on a different aspect of outdoor learning. The book is explorative in its approach, fragmenting the concept of outdoor learning into several segments. These segments correspond to different chapters. The first chapter introduces the concept of outdoor learning and elaborates on the overall framework of the book. The second chapter guides the reader into the world of co-design, a term fundamental to arki\_lab's core values. Chapter three explores how urban spaces can be used for more than one purpose. The spatial connotations and boundaries of learning spaces are explored in chapter four. Chapter five digs into spaces that enable incidental learning. After touching upon different types of learning environments, chapter six revolves around the items that are needed, or is beneficial, when teaching outside. Chapter seven advocates for the benefits of outdoor learning and finally chapter eight explores how to create a culture of outdoor learning through a shift in the existing educational systems.



## chapter 6

# BASIC ELEMENTS FOR OUTDOOR LEARNING

When talking about outdoor education, one comes across a lot of theoretical concepts, some of which have been covered in the previous chapters. But then there are also the practical and concrete things, for example the stuff that kids and teachers should bring along for outdoor classes. These physical elements can help transform an everyday outdoor space into a learning environment. Without further ado; flip onto the next page to learn about some physical elements of outdoor learning!





# Stuff that makes a classroom

How do specific materials help convert outdoor spaces into learning environments?

How does a conventional indoor space turn into a learning environment? How does that room differ from a kitchen? Besides the presence of students and teachers there are all sorts of things that create a learning space: the teacher standing in front of a blackboard, students sitting on chairs at tables either with notebooks or laptops. These are some of the objects that help create a room for learning. The traditional stuff in classrooms aren't readily available in outdoor spaces.

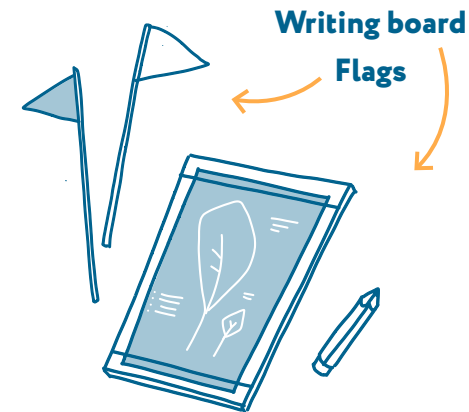
As outdoor education offers a variety of unique learning objectives in each place, the stuff one brings along also varies. If the students have to listen to the

teacher for a longer period, they need something to sit on, to focus better. If they need to research plants in a park, they need a different set of things, like papers, writing boards and maybe magnifier glasses. That's why it's difficult to come up with a universal list of objects that could be used in all outdoor learning conditions. Also stuff for outdoor education differ from traditional classrooms and sometimes require more creativity to establish a learning environment. Despite this, on the right is a small list of some of items that could be used to facilitate outdoor education. The list is a stepping stone to serve as inspiration!

Proper Clothing

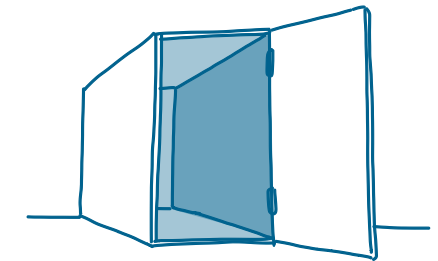


Whistle

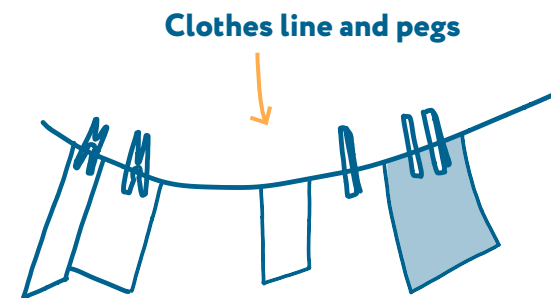


Writing board

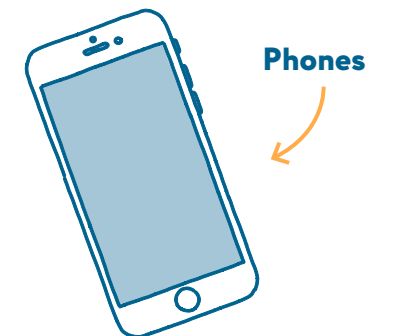
Flags



Storage



Clothes line and pegs



Phones

## Proper clothing

It's a common saying in Scandinavia that there's no such thing as bad weather "only wrong clothing". Bad weather typically isn't considered a legitimate reason not to spend time outside. Proper outdoor clothing is important if focus is to be directed at anything else than wet socks, on days when it is pouring down. And while it is true that bad weather can be a major challenge to outdoor learning, it is a possible challenge to overcome with some planning.



## The whistle

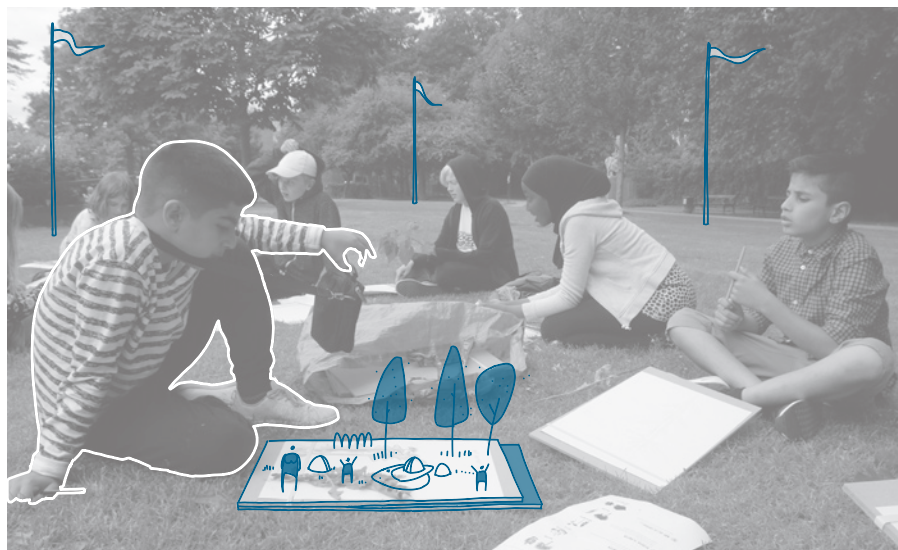
It might sound like a nightmare to some teachers to have their students, especially if they are young children, in a place without any physical restrictions. Instructions and rules, such as always stay in sight, goes a long way. In some scenarios, though, that particular rule will not suffice. In a forest it might be difficult to maintain the rule because the trees will obstruct the line of sight. In this case sound signals might do the trick. For example, a whistle can be used to convey behavioral cues in settings that require students to spread out. A whistle carries far and can be encoded to mean different things. Gather up! Next exercise! Lunch break! Sound signals create a common language in a class, avoiding the need to instruct all the time. That's what makes it so efficient.

Flip to **page 98** to read how Peter Lexdal, a nature guide at Karlebo Udeskole, uses a whistle in outdoor learning.



# Flags

As discussed in chapter four (page 89) it's important to define boundaries of learning spaces in order for the students to easily decode suitable behaviour. Establishing these boundaries can be done in many ways. For example the edges of buildings or the existing objects could be used to define what is inside and outside the outdoor classroom. In some cases though, it might be beneficial to define borders that don't exactly align with the existing ones. Small flags can act as the borders of an outdoor classroom. The flags can be used to indicate a certain set of rules that demarcate a learning environment. For example, the student are told not to run and shout within the borders of the flag or they are not allowed to go outside the circle of flags. The flags become a temporary border that marks a learning space; one that can be adjusted according to the specific needs throughout the day.



# Writing board

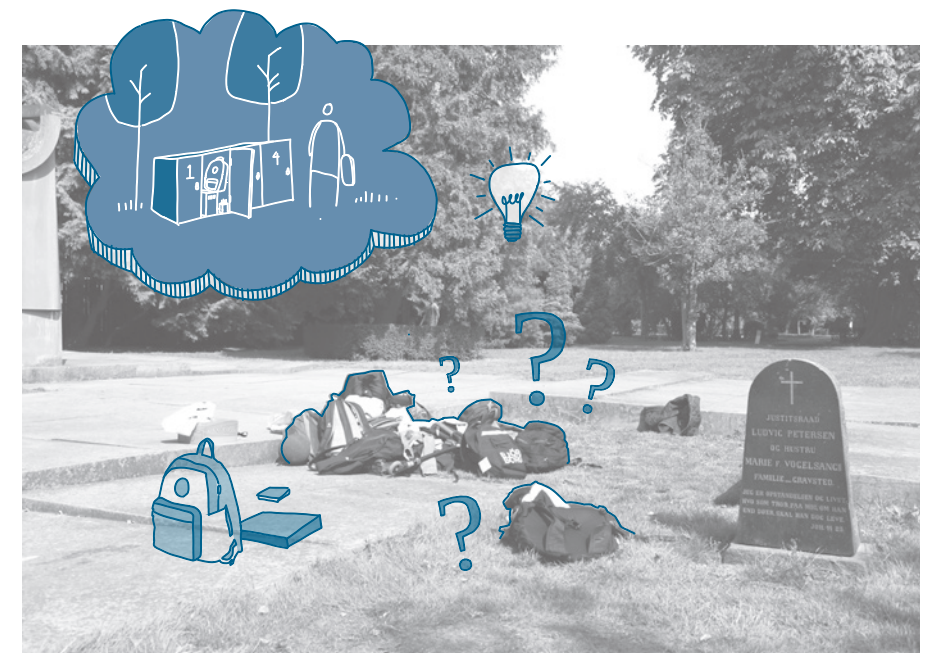
A simple tool, commonly seen in outdoor classrooms, is the writing board. It can take many different forms but essentially it's just a portable hard surface to write or draw on. At some point in their lives most people would have experienced being asked to lend their backs as a makeshift writing board. But this would be a headache for everyday practitioners of outdoor learning. A thin, lightweight board, made out of plastic, plywood or hardwood, can easily be brought along to any outdoor setting. The simple writing board substitutes the functions of a conventional classroom table. It not only enhances the students' mobility but also is a simple and flexible item that can be used for different subjects in a variety of situations.

Flip to [page 181](#) to read how flags contribute to the learning experience at Den Grønne Friskole.

# Storage

Imagine a situation where a teacher and 25 students are outside in a park, learning about biodiversity. The students maybe have their backpacks, their writing boards or their jackets with them. The teacher wants to send them to explore the park and bring back 5 different leaves. What should the students do with all their things? Should they bring them along? Well, no. That's not gonna be an optimal situation for anyone. Should they just leave them in a pile? Well, maybe. But what if it starts raining? This is where storage spaces come in handy. A storage space can be many things. It can be actual lockers outside) It can also come in the form of an agreement with the local grocery shop to keep the students' things in the shop while they explore.

Having a designated storage solution can make outdoor learning a more joyful experience for everyone, because it provides more freedom of mind and movement.



## Clothes line and pegs

A clothes line and some pegs can easily play the role of a classroom wall, on which things could be pinned up. It's a good way to collect and exhibit students' work. It makes it possible for the students and teachers to walk around, look at everyone's work and discuss them. On top of that, a clothes line and pegs are light and easily transportable. It takes no time to hang a clothes line, and it doesn't take more than two trees to do it.



## Phones

One might think that outdoor learning consciously distances itself from any technological item, disconnecting the students from today's hyper technological everyday life. To some extent that is true, but technology can also play a supportive role. Especially phones have become a part of most people's standard equipment, practically placing a whole encyclopedia right at their hands. So instead of carrying around heavy books, in most cases, the students can make do with their phones.

Besides a vast amount of information, the phones provide access to an ever increasing number of educational apps. These apps can help identify birds, leaves and insects. They can also provide a platform for interactive educational tools. The use of technology in outdoor learning is a much debated subject within the educational field. In the following interview with Karen MacLean, co-founder of Den Grønne Friskole, she argues that the inclusion of technology in outdoor learning should be done carefully as it can put a barrier between the students and the study subject.



## Karen MacLean

is the co-founder of Den Grønne Friskole in Amager, Copenhagen. The school's ideology is to integrate nature into the everyday school life, because children learn and thrive much better outside.

MacLean is a frontrunner when it comes to alternative teaching methods that concentrate on activating the senses

**Q** WHICH OUTDOOR SPACES ARE SUITABLE FOR EDUCATIONAL PURPOSES?

**A** All spaces are suitable for learning and teaching as long as the environment is safe and the learning activities do not obstruct other existing activities designated for those spaces. For example a highway wouldn't be an ideal choice but a pedestrian street or a workplace would be fine, as long as you don't disturb other people and existing functions.

In order to create good learning spaces, educators primarily need a couple of fundamental immaterial tools. They can use certain rituals, they've already practiced with the students in the classroom, which will provide the students with a familiar language even though the context is different. Students will know how to react to familiar terms and activities such as "make a school circle" or "find your walking partner", because they have practiced these many times before. Thus these rituals can transform a space, such as a pedestrian street, into a learning space, while respecting the existing activities of that place.

**Q** WHAT KIND OF TOOLS DO YOU BRING WITH WHEN YOU LEAVE THE SCHOOL?

**A** We bring a set of writing boards, which the kids can use to write, sketch or draw on. When it's cold and wet, we typically bring sitting mats. We also use a couple of wagons when we need to bring more stuff, such as fishing nets or sports gear. At our school we really recommend that parents buy proper hiking backpacks for the kids, instead of regular school bags. It's also quite important that their clothes accommodate the weather and season.



**Q** WHAT ROLE DOES TECHNOLOGY PLAY IN OUTDOOR LEARNING?

**A** I think information technology can play a supporting role but in my opinion it's best to keep those tools at school. When you're outside the school, it's important to experience the surroundings with your whole body and all your senses. One of the points of going outdoors is to sense it. It's for the children to use their whole body, or to sharpen their observational skills, using all senses. Science activities benefit in particular from visiting nature 'in the nude' several times a year in order to experience it with all our built-in 'technologies' – nose, tongue, ears, eyes and skin. Outdoor schooling also trains the senses that we do not think of so often, such as balance and proprioception, which are both essential also to classroom learning. Outdoor learning trains fine and gross motor skills, which benefits children

and their learning in the long term. I think that cell phones and tablets can easily get in the way of the very reason we go outdoors. It is much more valuable for children to listen to bird sounds and to attempt to describe it to each other, and then to learn what kind of bird it is or talk about what kind of bird it is. This kind of learning is much "stickier" and so is the other information, such as what the bird is seeking to accomplish by singing, which other animals are listening, and what they hear?

If you want to interweave outdoor education with technology, it is useful to think of a layered sandwich, where technology is always surrounded by several other layers and only plays a supportive role.

**Q** ANYTHING YOU WANT TO ADD?

**A** Outdoor learning is an extraordinarily powerful educational tool. It can provide our kids with a lot of stuff that conventional classroom teaching lacks. Stuff that kids are lacking in their everyday lives – which earlier generations had access to – because of the way we've structured our society. Outdoor learning has the potential to create better learning opportunities and a better quality of life for our kids!



# THERE IS HOPE

We finished our first book saying “the youth is the future and the future is under siege”. That statement hasn’t changed so much since then. There’s not a day we don’t hear about the environmental catastrophes caused by climate change. There’s not a day we don’t hear about a crisis that forces people out of their homes and sends them into the unknown. Are we getting too disconnected from nature and from our fellow humans? Are we losing connection with reality? How is that affecting us as individuals? How is it affecting our societies? It’s time to pause, reflect and think. And then we need to act, and quiet quickly too.

And of course there is hope. A lot of new movements and grassroots initiatives are addressing the big environmental and humanitarian issues of our time. What’s important is for us to contribute our share, if we care about the future of our children and our planet.

This book is our small contribution. We hope we can invite to think, inspire and act. We hope that with this book, we can introduce a new alternative that helps our young generations rediscover their lost connection with the world around them.



What happens when politicians, teachers, students, designers and developers start looking at public urban spaces as potential learning spaces? The City as a Classroom is an explorative inquiry into the potentials and challenges of using different areas of the city for outdoor learning. It's a collection of arki\_lab's own experiences with outdoor learning spaces and case studies of different best practices. Reading the book you'll meet teachers, researchers, architects, students, engaged citizens and many more, each with their own take on how outdoor learning can be beneficial to both students and society as a whole.

The book is meant to inspire anybody with ties to the built environment and the educational system. It's a juxtaposition of urban design, architecture, didactics and politics that will hopefully change the way to look at public and educational spaces.



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