Stenlængegaard Design proposal

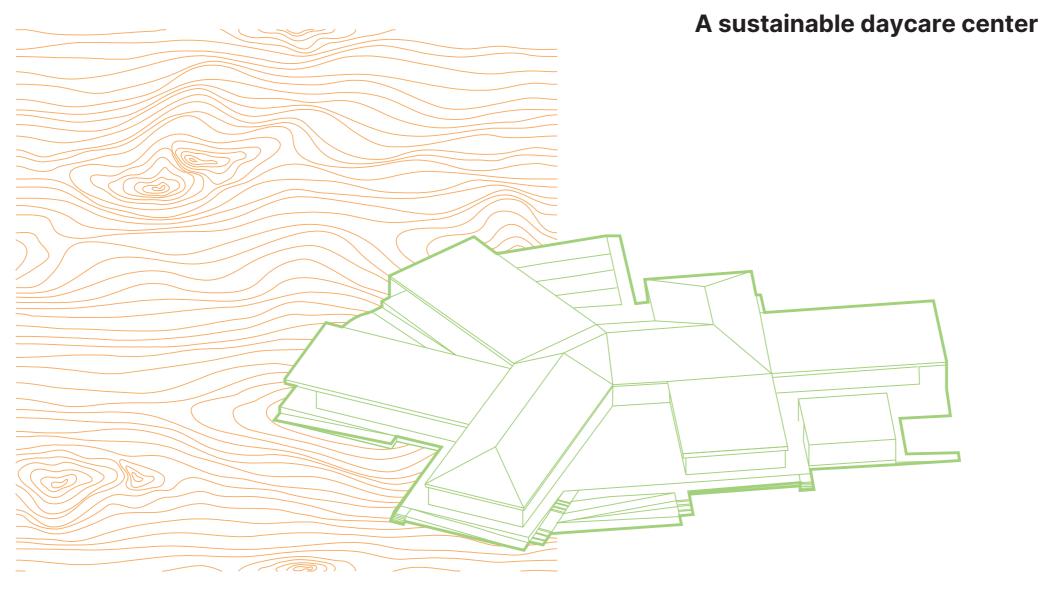


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Title page

Department of Architecture, Design & Media technology

Title Stenlængegaard

Theme Sustainabel daycare center

Project period 1 st February 2024 - 31 May 2024

Group MSC04 group 15

Semester 4th semester of Architecture Thesis

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Pages 44

Appendix -

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Vision

Nestled amidst the vibrant town of Næstved, Stenlængegaard daycare center emerges as a beacon of sustainable design, seamlessly blending natural materials, child-centric considerations, and a natural aesthetic. The architectural proposal stands as a testament to the harmonious integration of environmental consciousness and the well-being of young minds.

At the heart of Stenlængegaard daycare center lies an unwavering commitment to creating a space that truly caters to the needs and aspirations of children. The design prioritizes child-scale elements, ensuring that every corner of the building is accessible, engaging, and conducive to exploration and play. Soft, natural materials and playful accents create a warm and inviting atmosphere, while thoughtfully designed spaces encourage imaginative play, social interaction, and cognitive development.

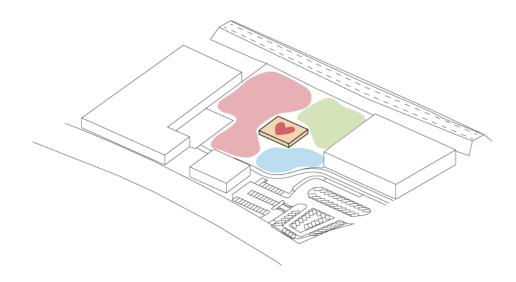
Drawing inspiration from nature's inherent beauty, Stenlængegaard daycare center embraces natural material design principles. Natural light floods the interiors, creating bright and airy spaces that promote alertness and well-being. Abundant greenery outdoors, provides a breath of fresh air and a touch of natural beauty, while carefully curated views of the surroundings further enhance the connection with nature. The integrated ramps creates a connection between nature and the building that demands for different uses and brings a connection from the building to the context.

Stenlængegaard daycare center show-cases the beauty and sustainability of natural materials. Locally sourced timber form the building's structure, while breathable clay and earth-based finishes adorn the walls. These natural materials not only contribute to a healthy indoor environment but also embody the project's commitment to minimizing environmental impact.

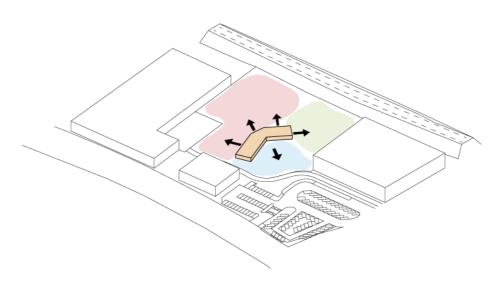
Stenlængegaard daycare center stands as a pioneer in sustainable daycare design, demonstrating the potential for early childhood education facilities to serve as exemplars of environmental stewardship. The project's holistic approach, encompassing natural material principles, child-centric considerations, sets a new benchmark for sustainable design in this sector.

As a beacon of sustainable design and child-centered care, Stenlængegaard daycare center will not only nurture the minds and bodies of Næstved's young children but also inspire future generations to embrace a harmonious coexistence with nature.

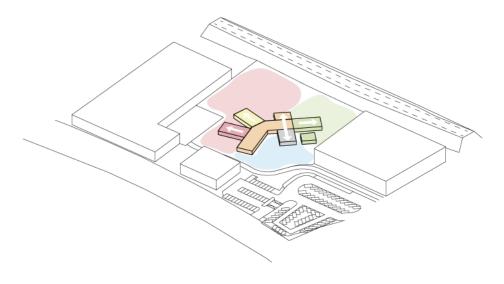
Concept



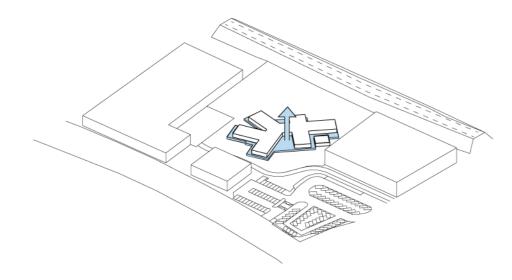
Heart space seperates the different zones



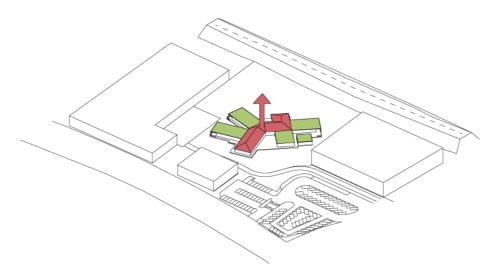
Building shape alows for an inclusive entre towards parking and extrovert directions towards playground and school



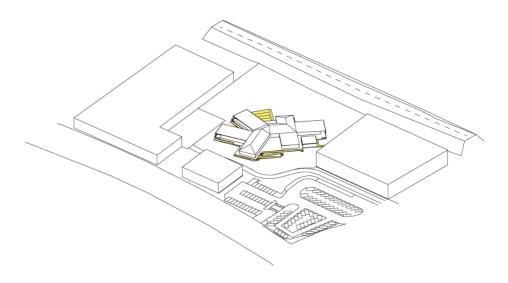
The different directions are extruded from the heart space and filled out with multiple functions



Foundation added to give the daycare center volumen and a status inbetween the higher context



Seperating the roof constructions of the common room to create differentiation and hiearki in the building.



Multiple ramps are placed to allow acces to the daycare center in relation to the different activies around it

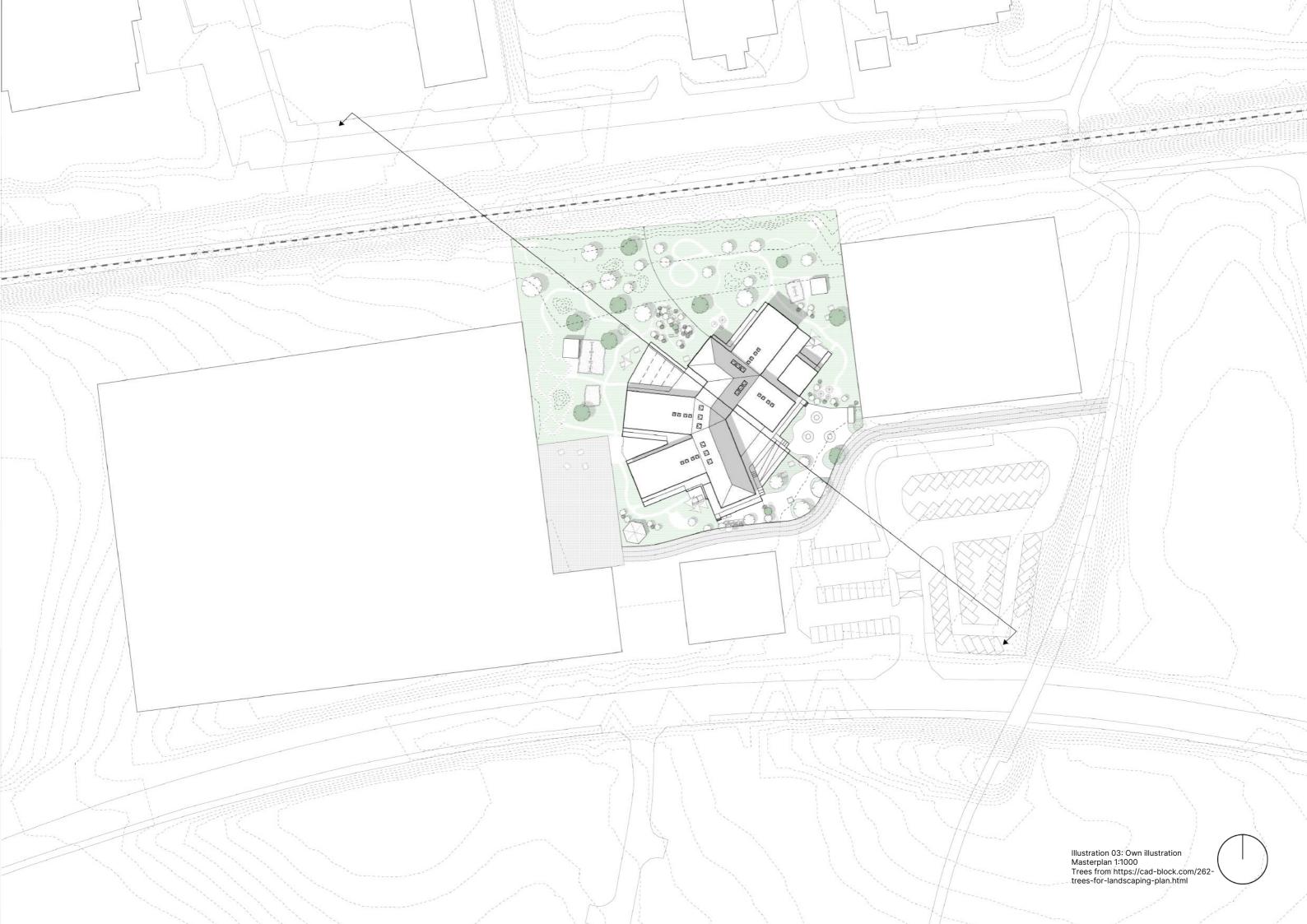
Masterplan

The site is located on the outskirts of Næstved, in a new development area. The area will have a new school, sports gym, and community house. A new residential area is being developed south of the site, which is why the new institutional facilities are being built. The site is approximately 9,000 square meters, and the building design occupies just under 1,200 square meters, resulting in a plot ratio of 15%.

The building is designed on one floor with a raised roof on the central volume. This creates a connection to the upcoming school and sports gym while also allowing for a higher ceiling in the common area, fostering a more open, creative, and active atmosphere. The rest of the building has a flat roof which accomodates for more relaxed and calm activities

A large parking lot will be located southeast of the site, serving all three institutions. The path south of the site is the main connection to the new residential area and is considered the primary entrance to the area, leading into the central area called School Plaza.





Siteplan

Zooming in on the site, the playground area is divided into a zone for the kindergarten children and one for the nursery children. The northeast corner, the most protected and quiet area, is the perfect place for the nursery playground, sheltered from the activity and noise of the school. The rest of the site is dedicated to the kindergarten playground and arrival area. The kindergarten playground is divided into different play environments, with activity levels increasing the further they are placed from the building. In the arrival area, a more formal and functional atmosphere is prioritized to welcome guests and after-hours users.

To create a connection to the school plaza, the fire pit is placed in the corner next to it. Adjacent to the nursery playground, a sensory garden provides the kindergarten children with a controlled environment for exploration. In the northwest corner, a wilder area with small hills and tall grass offers a space for more uncontrolled exploration and play.

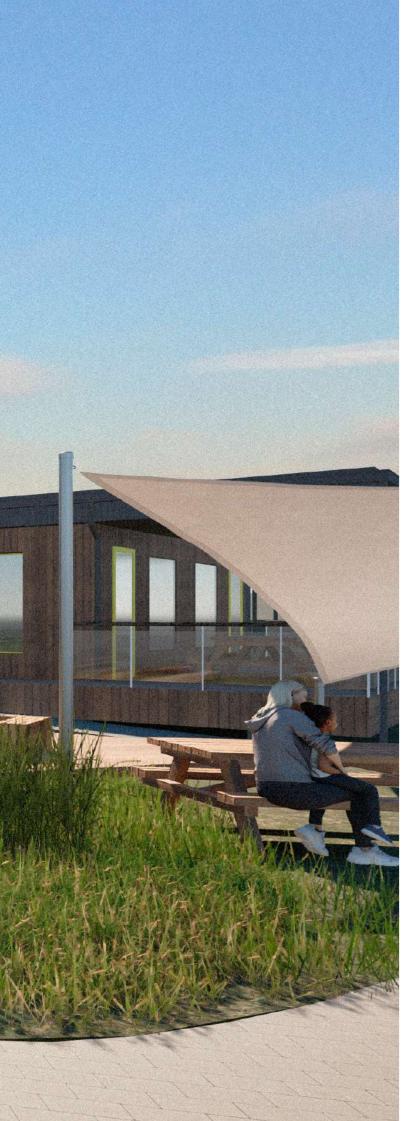
In the center of the kindergarten playground, directly adjacent to the building and common area, a large staircase is placed where children can sit and play on the platforms or tables. On the other side of the building, connected to the arrival area, a large terrace with additional tables and raised vegetable and herb beds creates a smaller area where children can be outdoors at the end of the day when there are fewer children and teachers.



Illustration 04:Own illustration
Section through common room 1:1000
People and trees - from Studio alternativi made by CAD LAB studio
Trees - from pimpmydrawing.com
Icon - own illustration









ROOF

Reusable steel roof and gutters

- Reusabel
- Strong durability
- Long life time



Illustration 07: Own picture



Facade

Reused screen bricks

- Low carbon emmision
- Strong durability
- Long life time



Illustration 08: Own picture Red bricks



Facade

Pine tree

- Low carbon emmision
- Changes character over time
- brings a warmth to the facade compared to the brick wall



Illustration 09: Own picture
Pine tree



Terrace

Pine tree

- Low carbon emmision
- Changes character over time
- brings a warmth to the facade compared to the brick wall



Illustration 10: Own picture
Pine tree

Illustration 06: Own rendering Outside rendering looking at the urban staircase in between group room and 'motorikrum' Made with Twinmotion

The rendering looks up the large staircase between the 'motorik' room and the kindergarten, showcasing the differences in material cladding between the group rooms and the common area. The identity-giving window frames are painted in the color of the 'tvillingegruppe,' and the various window types allow children to sit either inside the niche or outside. To the left, you can see part of the sensory garden, and to the right, the patio entrance of the group room. The rendering also reveals some of the roof windows that illuminate the kindergarten entrance. This is the place where the the new kindergarten concerts and family concerts are being held. All to create a connection to not only the context but also the community and city.

Elevations



Illustration 11: Own Illustration
Elevation perpendicular to the administration towards southeast
People and trees - from Studio alternativi made by CAD LAB studio
Trees - from pimpmydrawing.com
Icons - Own illustration



Illustration 12: Own Illustration
Elevation perpendicular to the Kindergarten group room towards southwest
People and trees - from Studio alternativi made by CAD LAB studio
Trees - from pimpmydrawing.com
Icons - Own illustration



Illustration 13: Own Illustration
Elevation perpendicular to the nursery towards north
People and trees - from Studio alternativi made by CAD LAB studio
Trees - from pimpmydrawing.com
Icons - Own illustration

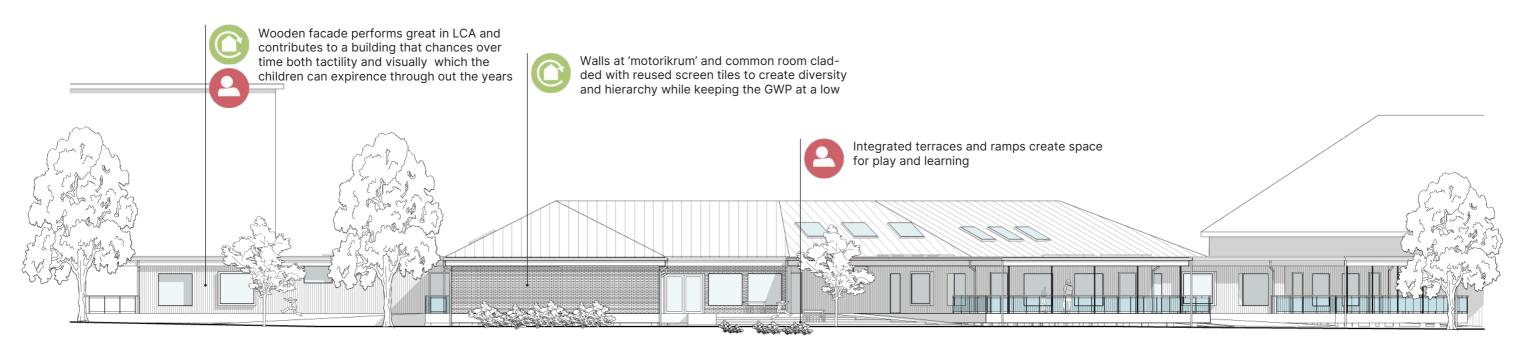


Illustration 14: Own Illustration Elevation perpendicular to the 'motorikrum' towards Northwest People and trees- from Studio alternativi made by CAD LAB studio Trees - from pimpmydrawing.com Icons - Own illustration

Arrival flow

A high priority during the project was implementing the right number of entrances and encouraging parents and children to walk around the kindergarten. This gives children the opportunity to observe their surroundings before entering the building. Most users are expected to arrive by car or bike, so the main arrival point is in the southeast corner. Each 'tvillinge-gruppe' has its own entrance, minimizing potential chaos during drop-off and pickup times in the mornings and afternoons.

Pedagogue

Delivery

Kitchen staff

After hours

11111111111

Parents



Floorplan

The floor plan shows the interior of the entire building. Green represents the nursery 'tvillingegruppe' and its associated 'liggehal'. Yellow and red represent the two kindergarten 'tvillingegrupper' classrooms. White represents the kitchen and administration areas. Finally, orange represents the common area, which includes the 'motorikrum' and the 'pædagogiske køkken' at each end.

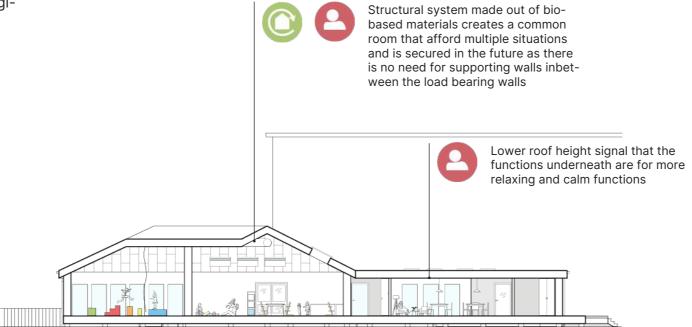


Illustration 16: Own Illustration Section through 'motorikrum', common room and administration People - from Studio alternativi made by CAD LAB studio Icons - Own illustration



Integrated wardrobe space for the children to store their clothes outside walking areas



Outdoor areas integrated into the building design



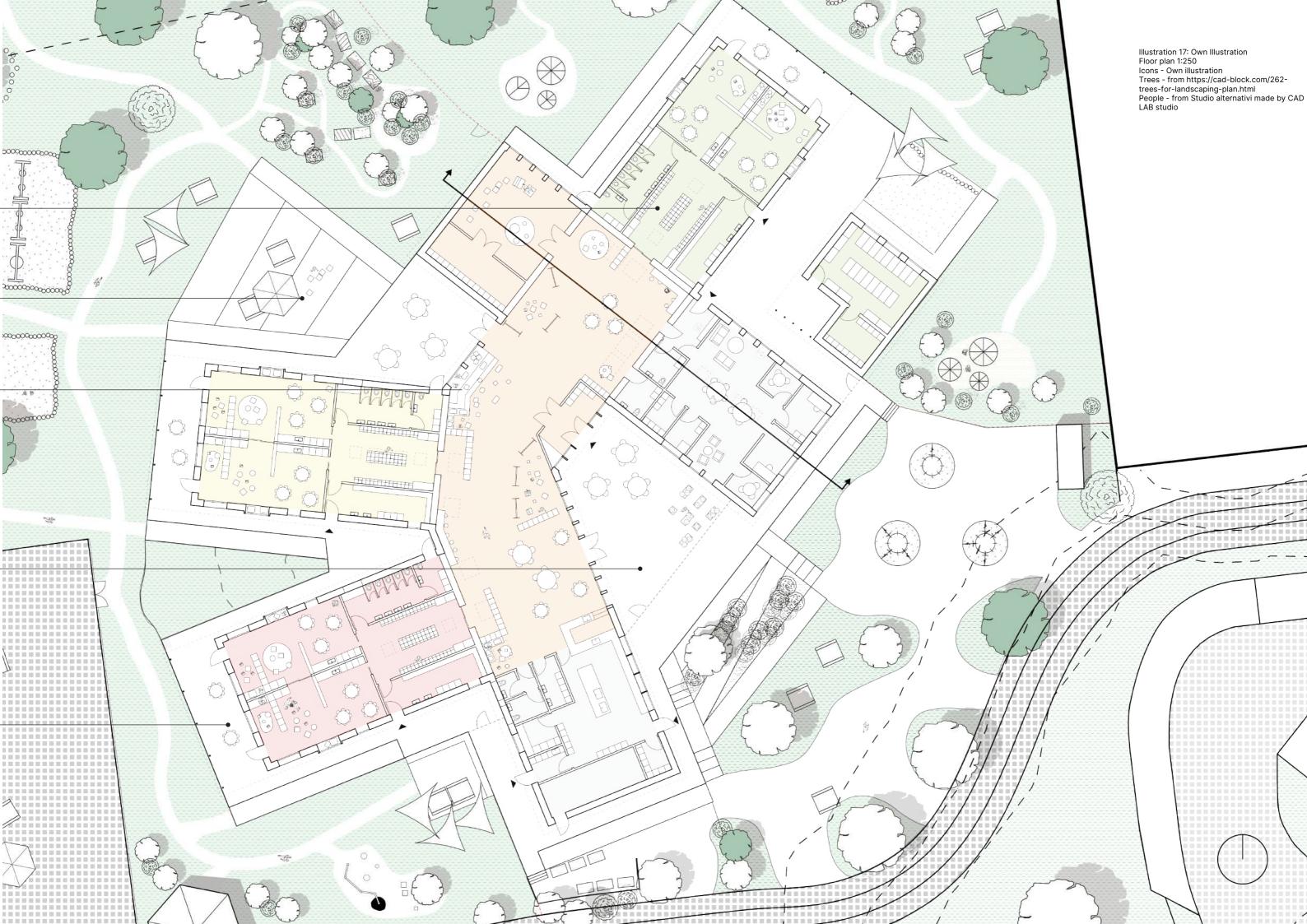
Common room design allows for many different play and learning environments



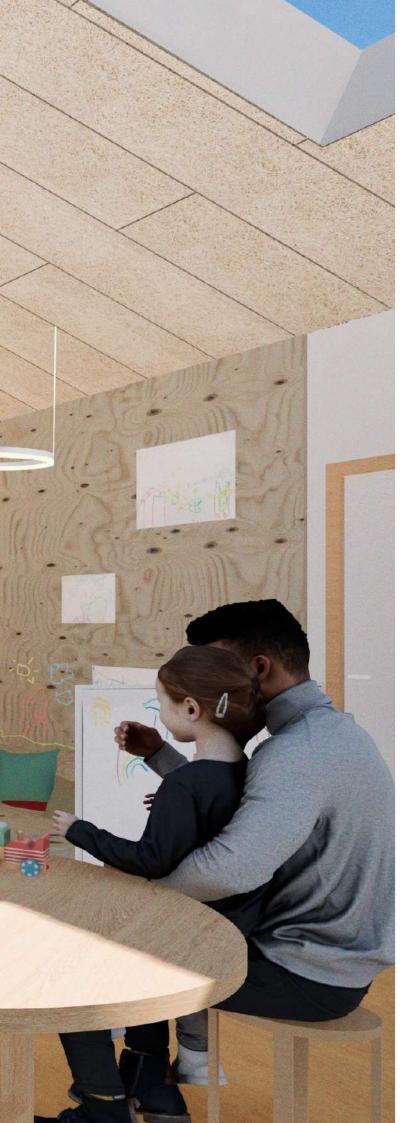
Screw foundation creates a natural division between building and playground while being environmental sustainable



Overhangs creates shading and therefore a good indoor enviroment while also adding to extending the group room out while necessary









CEILING Wood cement

- Acoustic improvements
- Tactility



Illustration 19: Own picture Wood cement



WALL white Clay plaster

- Biobased material
- Strong durability



Illustration 20: Own picture White clay plaster



CREA ZONE

- Plywood
- Biobased material • Allows being used as a creative
- Easy to replace when drawn on



Illustration 21: Own picture Plywood



FLOOR Marigold Linoleum

- Biobased material
- Easy to clean



Illustration 22: Picture from Forbo Marigold Linoleum

Illustration 18: Own rendering Rendering inside common room looking towards

The common area is divided with one end dedicated to the kindergarten and the other to the nursery. The rendering showcases the nursery zone, which is further divided into smaller areas with different play environments. On the left side, there's a play area on the floor, and on the right, a wooden plateau. In the foreground of the rendering, tables are shown for drawing or other creative activities that require a surface.

Group room

One of the most detailed areas of the building is the group rooms, which were a key focus point during the design development. The investigations are reflected in the plan shown to the right. The wall separating the two group rooms was transformed into a large shelving system to fulfill the users' desire for storage close to the play areas. The system incorporates a sitting niche and a small kitchenette, and dividing shelving furniture is implemented to create multi-functional smaller zones for table activities, floor activities, and reading or relaxation activities.

The buffer zone between the common area and the group room consists of the 'grov garderobe' (rough wardrobe), 'fin garderobe' (fine wardrobe), and toilets. An accessible toilet, usable from both inside and outside, was implemented in all the 'tvillingegrupper' and can be easily converted into a regular toilet or used as a handicap toilet.

As the sections show, the windows have been designed to accommodate seating areas both inside and outside the building. The large covered area adjoining the group rooms is perfect for sitting in the shade for eating or other activities requiring a surface.

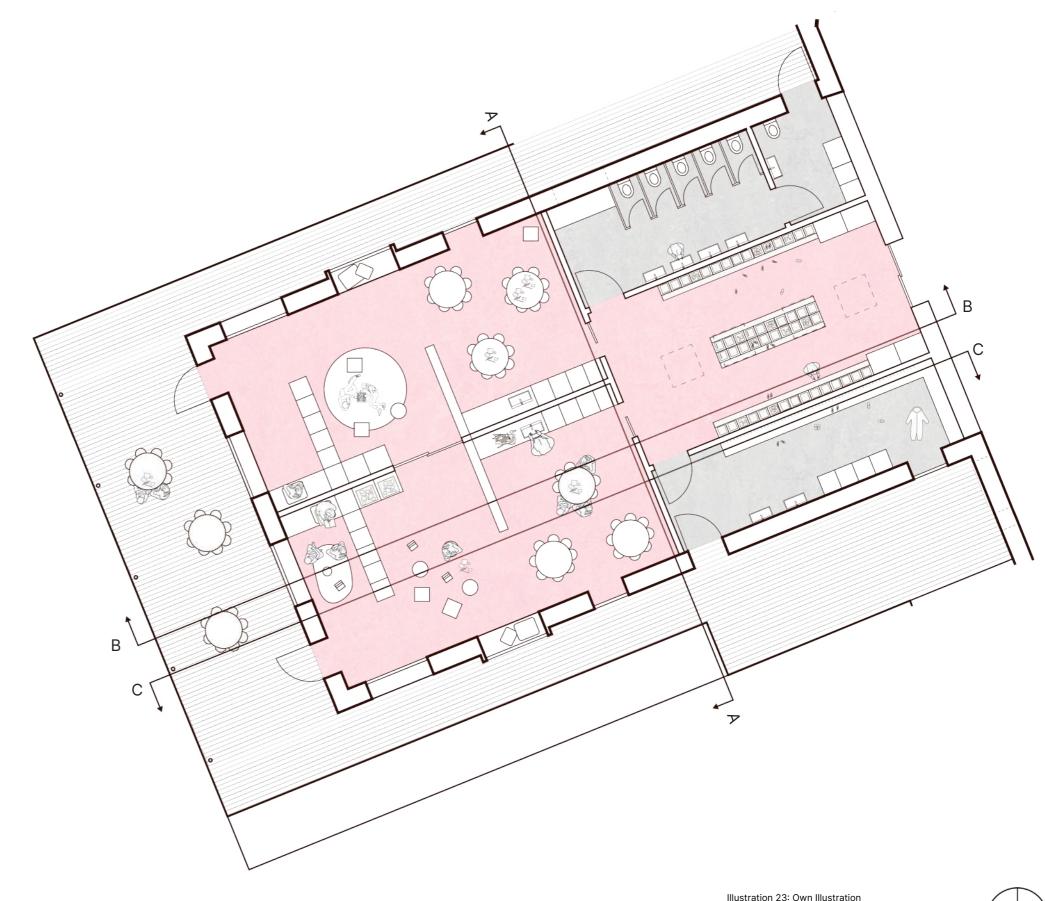


Illustration 23: Own Illustration
Group room plan 1:100
People - from Studio alternativi made by CAD LAB studio
Red and grey floor texture - from Forbo.com

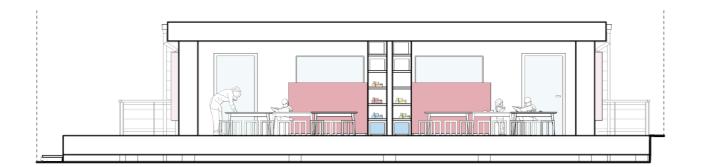


Illustration 24: Own Illustration Cross section AA through kindergarten group room 1:100 People - from Studio alternativi made by CAD LAB studio

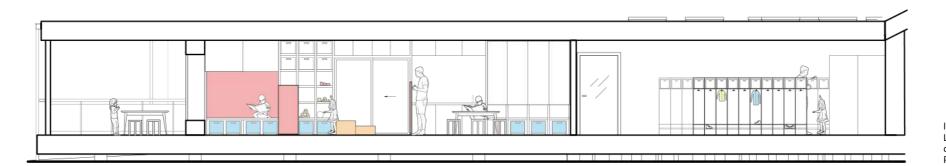


Illustration 25: Own Illustration Longitudinal section BB through kindergarten group room direction towards bookcase 1:100 People - from Studio alternativi made by CAD LAB studio

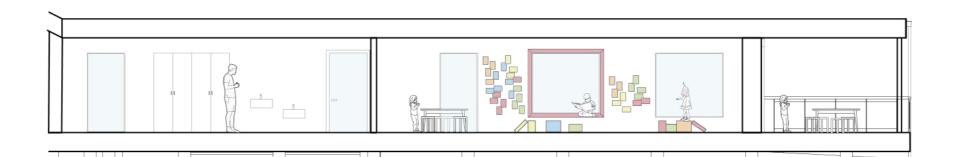


Illustration 26: Own Illustration Longitudinal section CC through kindergarten group room towards window niche 1:100 People - from Studio alternativi made by CAD LAB studio





CE

CEILING

Wood cement

- Acoustic improvements
- Tactility



Illustration 28: Own picture Wood cement



WALL

White clay plaster

- Biobased material
- Strong durability



Illustration 29: Own picture White clay plaster



BUILD IN BOOKCASE

- Birch
- Biobased material
- Age gracefully over time



Illustration 30: Own picture Pine wood



FLOOR Natural corn Linoleum

- Biobased material
- Easy to clean



Illustration 31: Picture from Forbo

Illustration 27: Own rendering Rendering inside group room Made with Twinmotion The materials in the group rooms are carefully chosen to meet the needs of the users. The easy-to-clean linoleum flooring, colored in each group room's specific color, sets the foundation for the space. Niches and smaller details all reflect the group room's color scheme. Additionally, wherever possible, acoustic regulation materials have been chosen to create a pleasant indoor environment. The dividing furniture and the facade wall are kept clean surfaces for the pedagogues to hang up the children's drawings.

Room program

The room program is inspired by the initial program, considering factors such as rooms, people load (capacity), room quantities, flexible rooms, spatial needs, and privacy. These factors have all been adapted to inform the design proposal.

The functional diagram is a visual representation of the room program. It shows the connections between the rooms and, on a conceptual level, also indicates their placement within the building.

ATMOSPHERE

Functional

A room with a specific function that is being reflected in the way it is designed. The functions reflect what the space is used for.

Active

A feeling of entering a space that allows for high activity without worrying about breaking anything.

Clean

The feeling of entering a clean and bright space that reflects a certain function.

Formal

A feeling of inclusiveness and welcoming. The transition space from public to the daycare center.

Homelike

The feeling of belonging and being safe. A space with familiar references that creates safety.

FLEXIBLE ROOMS

Whether the individual room can be used for several different things at the same time or has only one function.

SPATIALITY

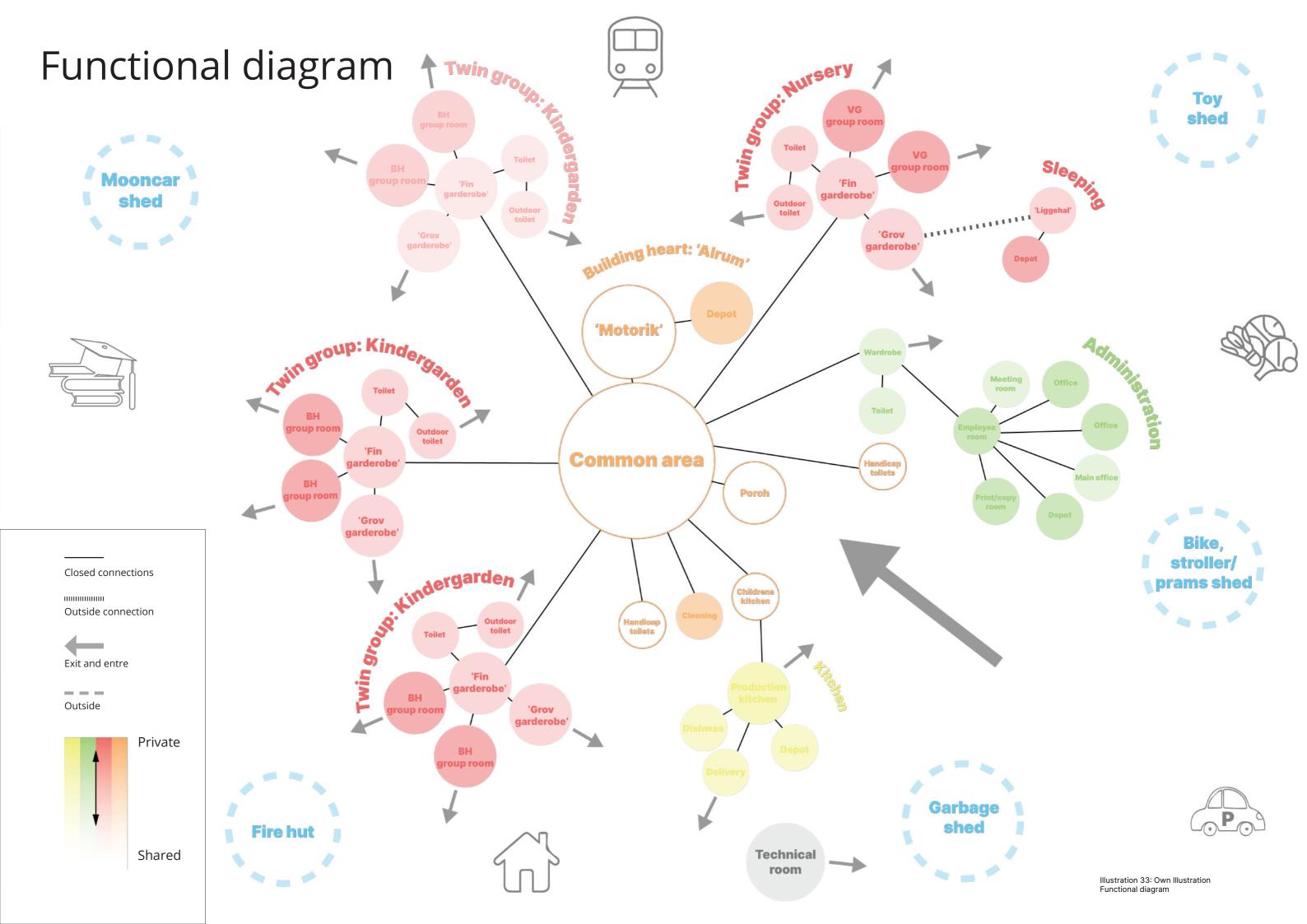
Room heights in relation to activity level

PRIVACY

Are the rooms shared with other groups, or is it only a single children/staff group that has access to it.

	Room	m^2	Amount
	Coverings for group rooms	32	3 (1)
or	Depot mooncars + toys	25	2
90	Depot technical	25	1
utdool	Fire hut with chimney	40	1
0	Guest parking for strollers/prams	10	1
	Garbage shed/yard	30	1

			Room program			orogram		
	Room	m²	People load	Amount	Flexible rooms From left to right Non-flexible Flexible	From left to right Low ceiling Medium height celining	Privacy From left to right Private Semi-Shared	
	Total area	1187 (210)			Very flexible	High ceiling	Shared	
Group rooms	'Grovgarderobe'	19	20	3 (1)	0	0-0-0	0-0-0	
	'Fin garderober'	36	20	3 (1)	0	0-0-0	0-0-0	
	Group room kindergarten	48	26	4(2)	0-0-	0-0-0	O OO	
	Group room nursery	38	15	2	0-0-	0-0-0	O OO	
	Children toilet	17	8	3 (1)	O	O —O—O	0-0-0	
	Outdoor toilet	6	3	3 (1)	_	O —O—O	0-0-0	
O	'Liggehal'	39	24	1	O —O—O	O —O—O	0-0-0	
	Depot	12	1	1	O —O—O	O —O—O	0	
	Porch	15	4	1	0	0-0-0	0-0-	
Common areas	'Alrum'	333 (45)	50	1	0-0-0	0-0-0	0-0-0	
	'Motorikrum'	52	26	1	0-0-0	0-0-0	0-0-0	
	Depot for play room	22 (13)	2	1	0-0-0	0-0-0	<u> </u>	
	Handicap toilet	6	2	2	O —O—O	O-O-O	0-0-0	
O	Cleaning room	7	1	1	O —O—O	0-0-0	0	
Kitchen	Production kitchen	53	3	1	000	0-0-0	0-0-0	
	Delivery of goods	6	1	1	<u> </u>	0-0-0	<u> </u>	
	Kitchen depot	6	1	1	OOO	000	<u> </u>	
_	Wash room	7	1	1	0	0	0	
ion	Wardrobe	10	8	1	0	0-0-0	0-0-0	
	Toilet	7	3	1	0	0-0-0	0-0-0	
	Employee room	60	20	1	0-0-0	0-0-0	0	
tra1	Main office	10	4	1	0-0-0	0	000	
Administration	Office	10	4	1	0-0-0	000	000	
	Meeting room	6	6	2	0-0-0	0	0-0-0	
<	Depot	6	1	1	0	000	0	
	Print/copy room	6	2	1	0-0-0	0	0-0-0	



Playground zones

The design proposal utilizes zoning to ensure there are play environments for all the different age groups. Hereinafter, the zones will be explained in relation to three different scales: the site, the building, and the group rooms.

The playground is divided into four zones: a formal arrival area and three activity levels with increasing activity levels as you move further away from the building.

Closest to the building are the "safe" zones placed where opportunities for immersion is paramount. next level is the controlled play environment with among other swings and sand boxes. Furthest away from the building the area with free play is place where the children can explore and play freely.









Formal arrival area





Building zones

The building is also divided into zones, ranging from public to private. The orange areas are always free for everyone to use. The green areas are rentable spaces accessible outside of normal daycare hours. Finally, the red areas are the most private and can only be used by the daycare staff and children.





Rentable / open for after hours



Group room zones

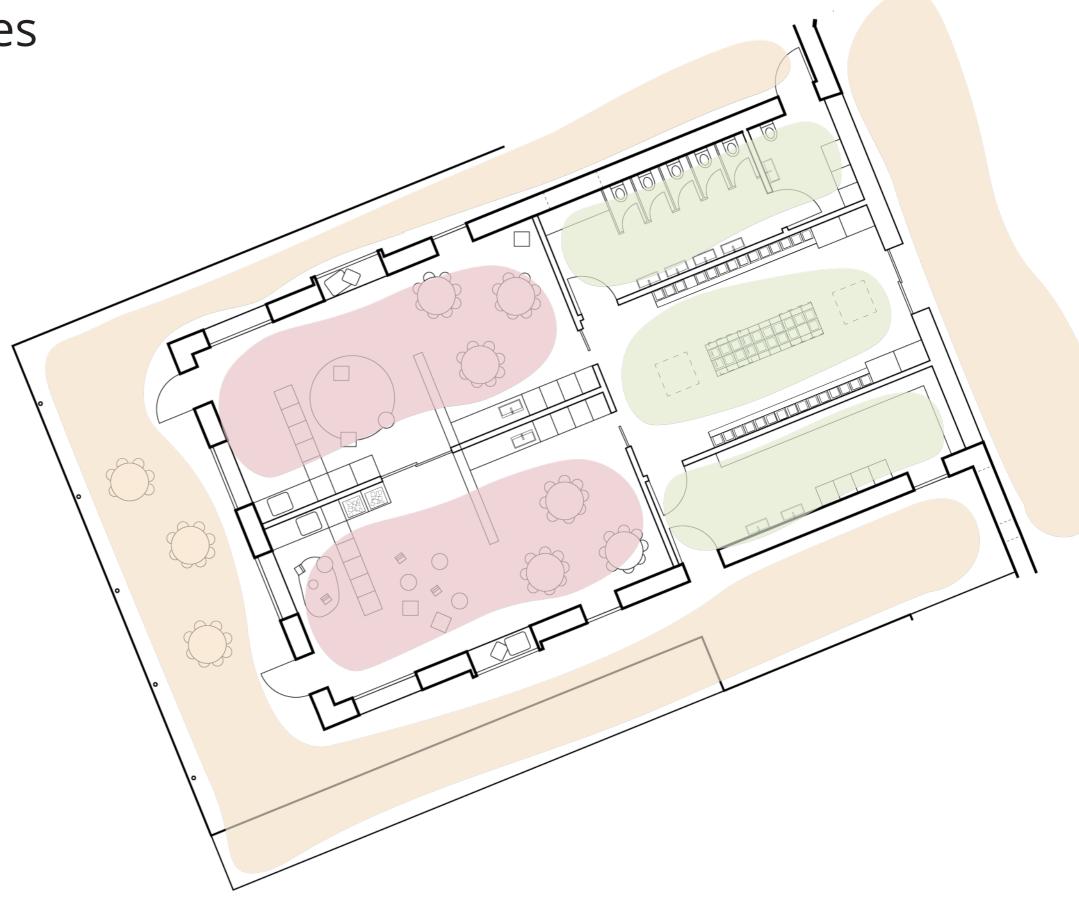
Within a 'tvillingegruppe' area, the design incorporates different privacy levels using the same color scheme as the entire building. However, in this context, the colors represent access for children and staff only. Orange spaces are the most public, used by everyone in the daycare. Green spaces function as shared areas. Finally, red spaces offer the highest level of privacy and are used exclusively by one specific children's group.

The design is inspired by Aldo Van Eicks children city and its division of zoning (Grafe et al., 2018). The 'tvillingegrupper' has their own "house" with a neighbor. Then entering the 'fin garderobe' as their shared front garden and then further on into the common room or outside which is the public.











Group room zones

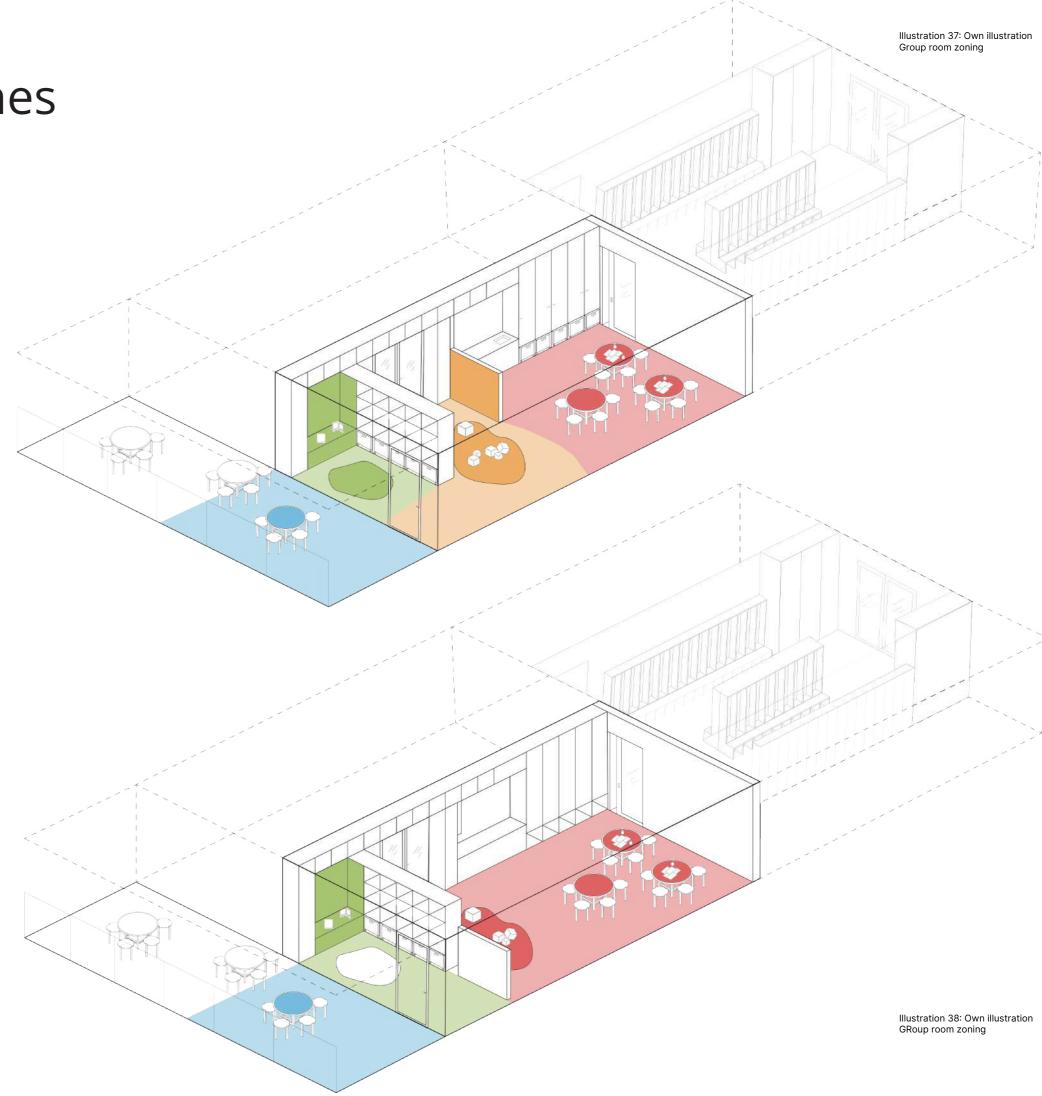
Activity levels

Higher activity

Flexible

Calm

Outdoor area



Activity levels



Flexible transition

Flexible

Calm

Outdoor area

Transition from outside to inside

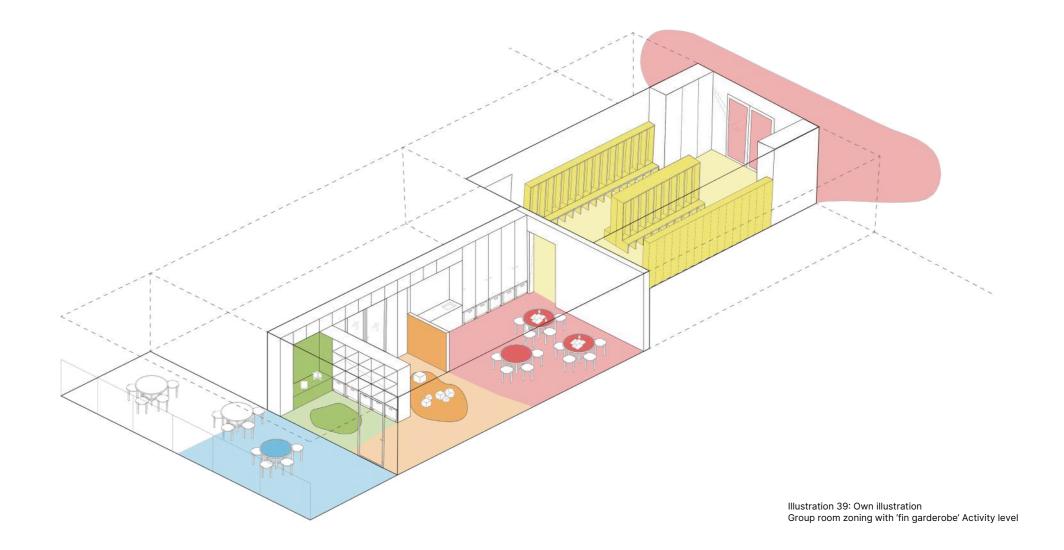
Outside

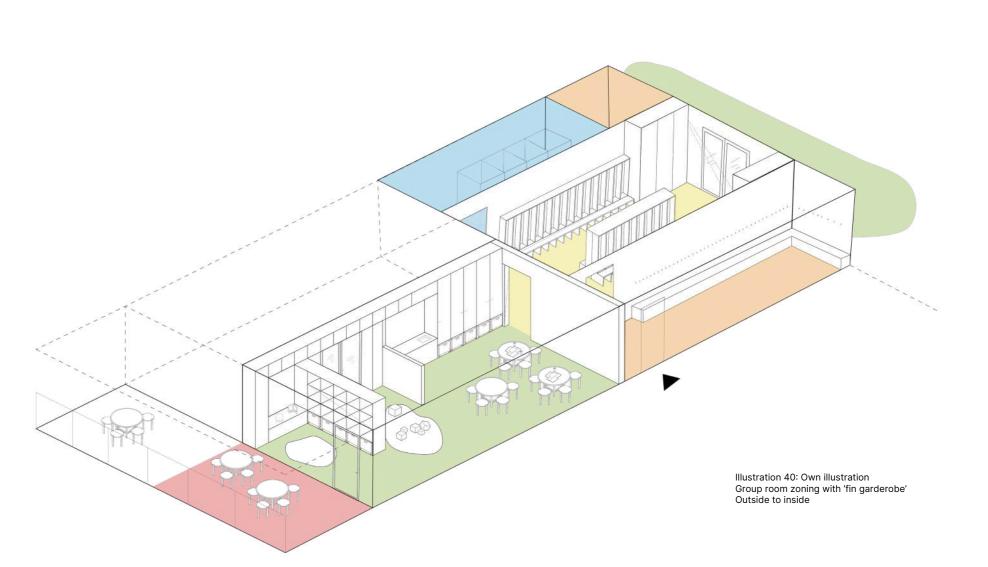
Transition

Dirty

Without shoes

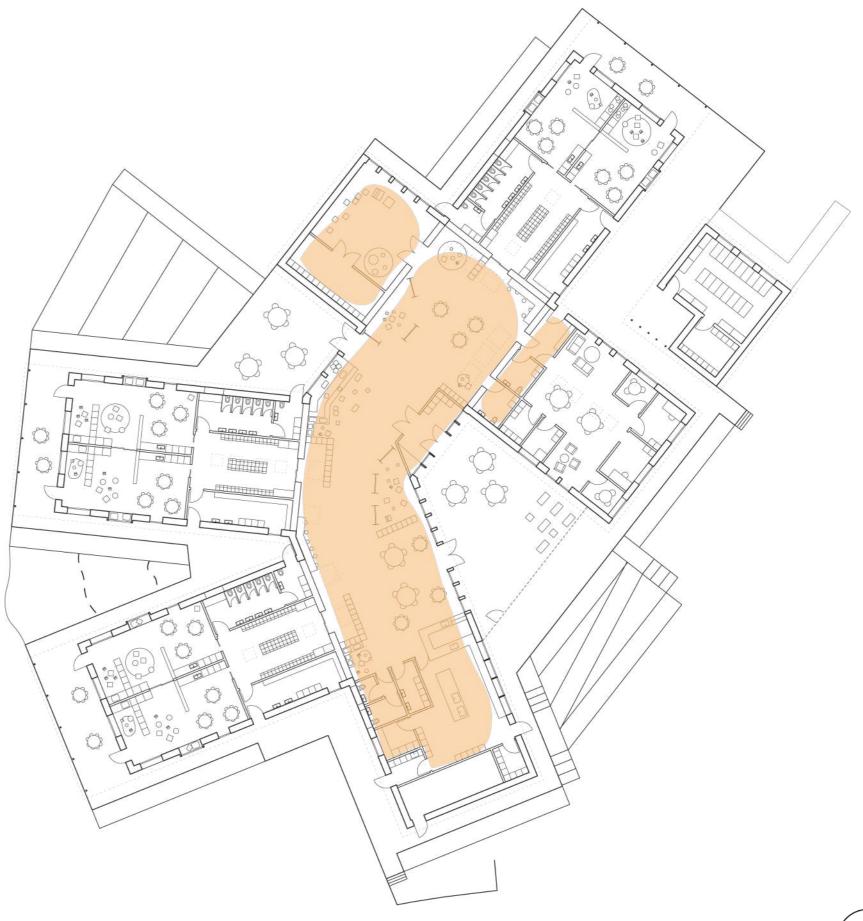
Clean toilet zone





Afterhours

The building zones allow for after-hours rental by clubs and organizations. These groups can access the core areas of the daycare, which include the 'motorikrum', kitchen, and common areas. This allows the building to be utilized for most hours of the day and create happines for most possible.



LCA

A Life Cycle Assessment (LCA) was conducted to measure the building's Global Warming Potential (GWP), which reflects its greenhouse gas emissions. To meet sustainability requirements, the building's GWP needs to be under 12 kg CO2/m² per year. The design proposal achieves a GWP of 9.3 kg CO2/m² per year, and this figure can be further reduced to 0.3 kg CO2/m² per year by factoring in the reusability of materials.

The LCA identified the roof as the main contributor to the building's GWP. However, the roof design incorporates a significant amount of wood, which can be reused or composted at the end of its service life, significantly reducing the overall environmental impact.

Materials

Roof: wooden construction with Troldtekt on the ceiling and steel-plats on the top of the roof

Walls: Wooden construction with wood on the outside of the group walls and screen tile on the main building. Inside all the walls are coated with wooden boards some with plaster

Foundation: Wooden construction the floor inside are wooden boards with linoleum in top. From the outside the construction is simply covered by a wooden board and raised from the ground by the screw foundation.

Volumen 4265 m³

Floor area 1432 m²

Wall area 581 m²

Roof area 1665 m²

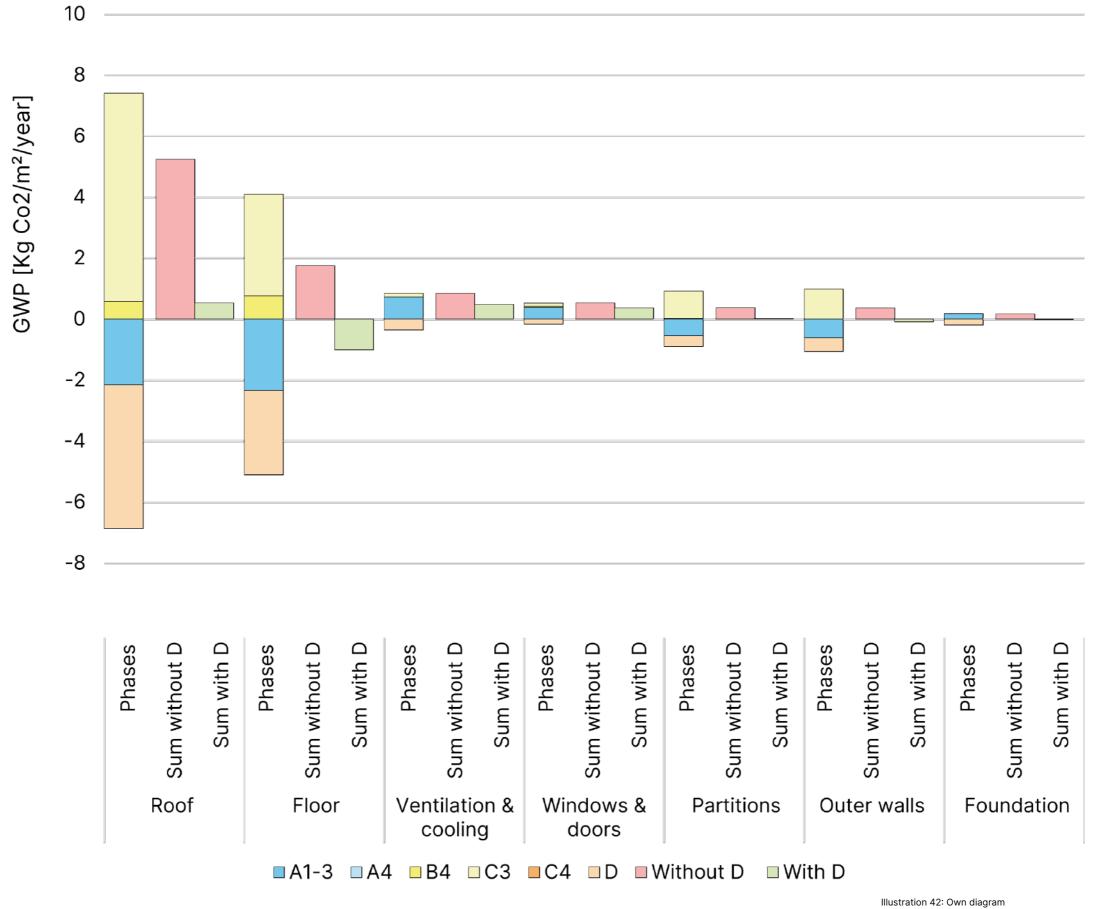
Surface area 3678 m²

Total GWP pr. m²

9.3 kg Co₂/m² pr year without D

Total GWP pr m²

0.3 kg Co₂/m² pr year with D



Based on data from LCA byg

Structural princip

- Hipped roof for extra room height
- Few load bearing inner walls
- Terrace transition zone
- Screw foundation under building

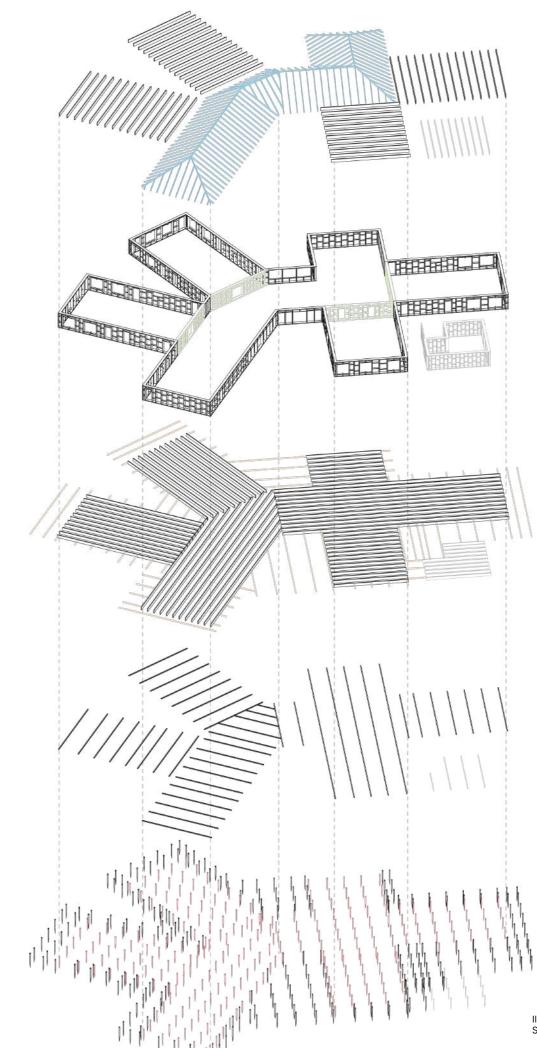
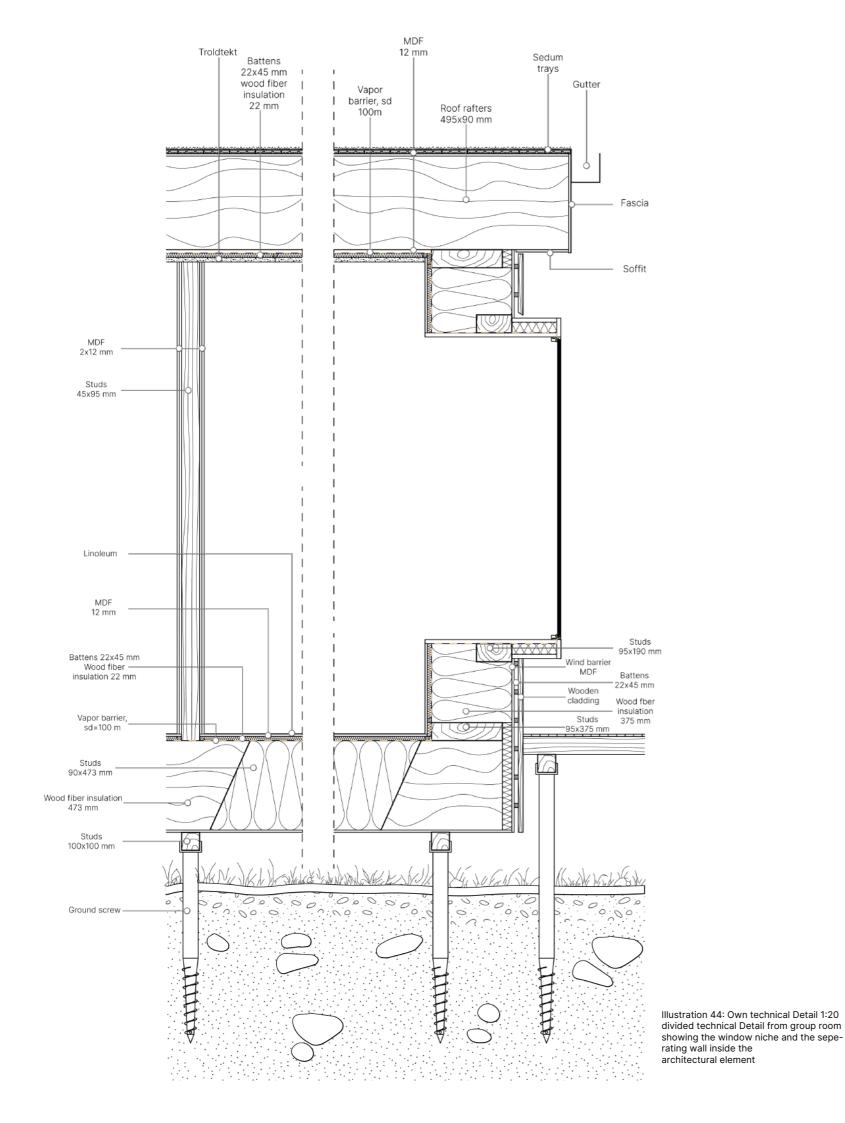


Illustration 43: Own diagram Structural princip



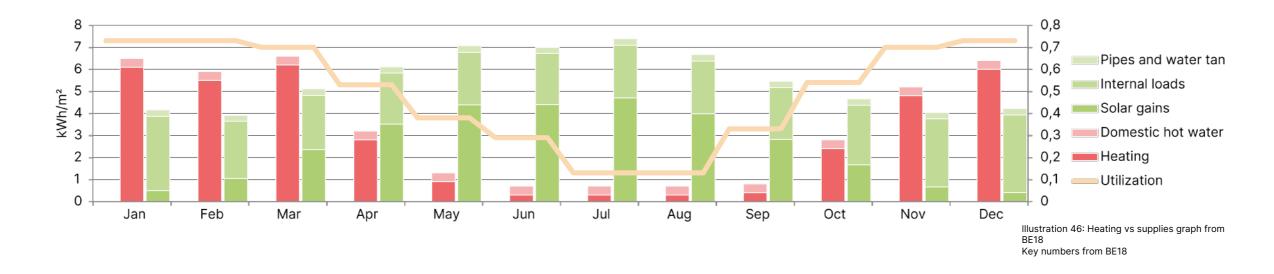
Wood fiber insolation 418 mm Roof truss 418x90 mm Wind barrier Battens 22x45 mm Steel roof 22x45 mm wood fiber Wood fiber Roof rafter insulation 495 mm Vapor barrier, 495x90 mm insolation 22 mm sd=100m tray Vapor barrier, sd=100 m Battens 22x45 mm Woodfiber insolationn 22 mm Troldtekt Vapor barrier, sd=100 m Battens 22x45 mm wood fiber insolation 22 mm Studs 425x45 mm Wood fiber insolation 425 mm 425x95 mm

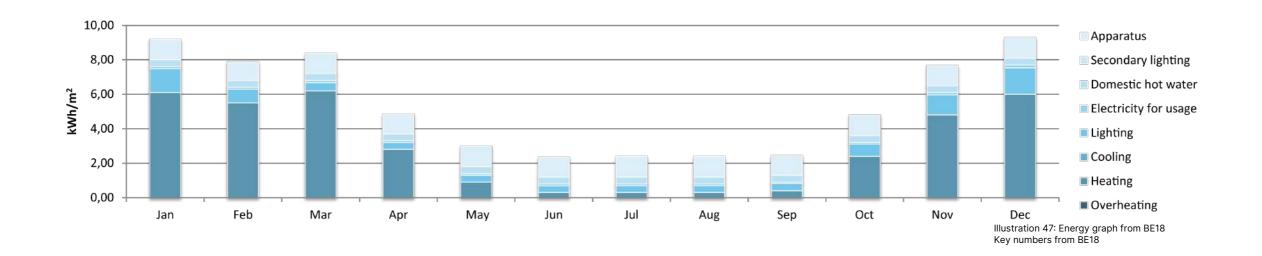
Illustration 45: Own technical detail 1:20

Technical detail of how the roof between group room and common room meets

BE18

A Be18 calculation was performed to ensure the building meets energy efficiency requirements. The target energy use is below 41.7 kWh/m² per year, and even lower (under 33 kWh/m² per year) to achieve the low emission class. The building's design delivers an energy performance of 36.4 kWh/m² per year, exceeding the requirements.





Temperatures			Ventilation			Internal loads		
Heating set point	C°	20	Area	m²	1432	Area	m²	1432
Cooling set point	C°	26	Time of use	%	1	People	W/m²	4
Room temperature	C°	20	Mechanical ventilation_winter	I/s m²	0,72	Apparatus	W/m²	6
Outdoor temperature	C°	-12	Natural ventilation_winter	I/s m²	0			
			Heat recovery	%		Heat distribution		
Building data			Infiltration	I/s m²	0,13			
			SEL	kJ/m³	1	Temperature_in	C°	70
Heated floor area	m²	1432	Mechanical ventilation_summer	I/s m²	0,35	Temperature_out	C°	40
Heat capacity	Wh/K m²	17	Natural ventilation_summer	I/s m²	7	Type of system	-	2 string
Time of use	h/week	45						
			Lighting			Length of pipes	m	100
Building envelope						Heat loss	W/mK	0,16
			Area_zone 1	m²	1038	b_placement of pipes	-	0
Area_wall	m²	581	Effect_minimum	W/m²	0			
Area_foundation	m²	1432	Effect_installed	W/m²	10	Domestic hot water		
Area_roof	m²	1675	Lighting level	lux	300			
U_wall	W/m²K	0,12	Daylight factor	%	5	Hot water usage	l/year pr. m²	100
U_foundation	W/m²K	0,1	Daylight control	-	K	System temperature	C°	55
U_roof	W/m²K	0,08	Time of use	%	1			
b_wall	-	1	Effect_work lighting	W/m²	2	2 District heating exchanger		
b_foundation	-	1						
b_roof	-	1	Area_zone 2	m²	394	Effect_exchanger	kW	12
			Effect_minimum	W/m²	0	Heat loss_exchanger	W/K	1
Area_window	m²	225,75	Effect_installed	W/m²	10	Minimum temperature_exchanger	C°	45
U_window	W/m²K	1,2	Lighting level	lux	100	b_placement of exchanger	-	0
b_window	-	1	Daylight factor	%	5	Effect_stand by	W	6
Ff_window	-	0,82	Daylight control	-	K			
g_window	-	0,63	Time of use	%	1	Key numbers		
Fc_window	-	0,4	Effect_work lighting	W/m²	2	Energy frame Br 2018	kWh/m^2 pr. year	41,7
						Energy frame low energy	kWh/m^2 pr. year	33,0
Illustration 48: Table from BE18 Key numbers from BE18						Energy usage	kWh/m^2 pr. year	36,4
								37

Bsim

To ensure a comfortable indoor climate, a BSim simulation was performed for a kindergarten group room. The simulation focused on overheating, aiming for no more than 100 hours exceeding 26 degrees Celsius and no more than 25 hours exceeding 27 degrees Celsius throughout the year. The simulation results indicate a strong reliance on natural ventilation due to the building's lightweight construction, which is more susceptible to outdoor temperature fluctuations.

Regulations for overheating

Max 100 hours above 26 degrees and 25 hours above 27 degrees for institutions and schools.

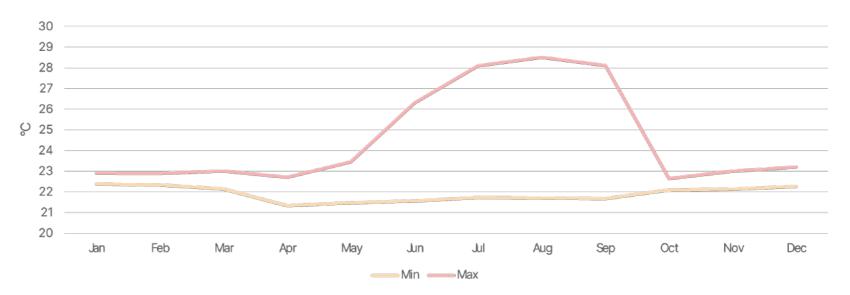


Illustration 50: Graph from BSim Max and min temperature graph from BSim

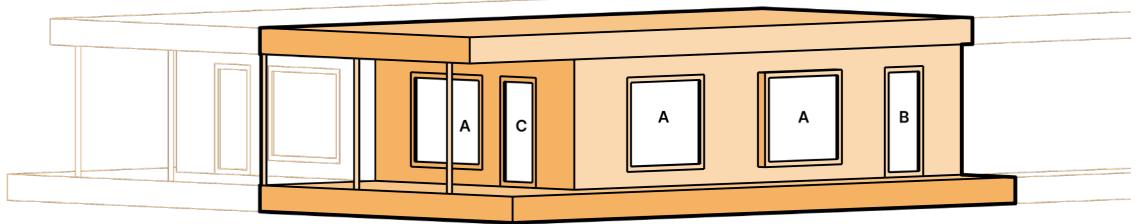


Illustration 49: Own illustration Nursery group room towards West

RESULTS

> 26C: 62 hours

> 27C: 25 hours

Floor		Windows	
Netto	38 m2	Window A	
Brutto	45 m2	Size	2 × 1.8 m
		Pane area	1.8 × 1.6 m
Volun	nen		
		Window B	
Netto	103.4 m3	Size	1 × 2,1 m
Brutto	172.4 m3	Pane area	0.8 × 1.8 m
		Door C	
		Size	1 × 2,1 m
		Pane aea	0.8 × 1.8 m

Conceptual fireplan



Future possible extension

Plans showing the posibility for a future extension of a kindergarten 'tvillingegruppe' both in roof plan and floor plan.



Plot ratio with extension 17%

Illustration 52: Own illustration
Future extension roof plan 1.500
Trees from https://cad-block.com/262-trees-for-landscaping-plan.html
People - from from Studio alternativi made by CAD LAB studio



Illustration 53: Own illustration
Future extension Floor plan 1:500
Trees from https://cad-block.com/262-trees-for-landscaping-plan.html
People - from from Studio alternativi made by CAD LAB studio

Conclusion

Stenlængegaard Daycare Institution: An Integrative Approach to Sustainable Design

Stenlængegaard Daycare Institution is a design proposal that harmoniously integrates environmental sustainability, specifically through LCA, with social sustainability principles. This synergy is aimed at creating a cohesive and sustainable architectural design. The project's guiding problem statement is:

"How can the building design of the next generation of Daycare centers take into consideration the wellbeing of children and pedagogues in a socially sustainable manner, while still being environmentally sustainable. How can we ensure continued flexibility in relation to speciality, materiality, and functionality to accommodate future functions and users of the building, all while adhering to the stringent GWP regulations of 12 kg CO_2/m^2 per year or less?"

User-Centric Design and Functional Programming

The design process actively involved the future users of the building - children and pedagogues - whose feedback significantly informed the development phase. This collaborative approach facilitated the creation of diverse play environments,

including niches for immersion and activity spaces characterized by physical engagement. The functional programming of the daycare center ensures smooth transitions throughout the building, from group rooms, through the 'fin garderobe', and into the common room, thereby enhancing navigability and user experience. Color-coded 'tvillingegrupper' further aid in fostering a sense of belonging and orientation among the children. Moreover, the common room is designed for multifunctional use, extending the building's utility beyond regular daycare hours, thus benefiting the broader community, and optimizing the building's usage. To optimize for future possible uses all constructions are dimensioned so that the building envelope is the loadbearing wall. This means that the walls in between is flexible and can be moved if necessary. Therefore the structural system makes It flexible in adapting to possible new functions.

Integration of Social and Environmental Sustainability

The interplay between social and environmental sustainability is reflected in the building's construction and materiality. The design strategically creates distinct areas and zones tailored for various uses, all while adhering to strict environmental regulations. Central to this approach is the use of biobased and reusable/recycled materials.

This material strategy not only meets the goal of maintaining a GWP below 12 kg $\rm CO_2/m^2$ per year achieving 9.3 kg $\rm CO_2/m^2$ per year but also achieves a high architectural standard of spatial quality. The hierarchical arrangement of the building, with a clear delineation between the main body and the wings, underscores the design's heart the common room.

Innovative Foundation and Material Usage

The utilization of a reusable screw foundation is a notable feature, providing terraces that facilitate calm activity zones where children can engage in imaginative play without interference from playground activities. This foundation choice also promotes a transition between the building, playground, and surrounding context, fostering interactions and gatherings.

In summary, the Stenlængegaard Daycare Institution exemplifies a sophisticated approach to daycare design, balancing stringent environmental criteria with the need for socially sustainable, user-friendly spaces. The project demonstrates how integrative design practices can create multifunctional, sustainable environments that cater to both current needs and future adaptability.

Illustration 11: Own Illustration
Elevation perpendicular to the administration

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mustratio	//	https://www.forbo.com/flooring/da-dk/pro dukter/linoleum/marmoleum-marbled/marmole	Room program
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Section through common room 1:1000	studio https://studioalternativi.com/products/vec	Wood cement	Illustration 35: Own Illustration
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Masterplan 1:1000	room towards southwest. People and trees - from	Illustration 22: Picture from Forbo Marigold Linoleum	19 Illustration 38: Own illustration
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LAB studio	https://studioalternativi.com/products/vector-cad-	Longitudinal section BB through kindergarten group	Illustration 46: Heating vs supplies graph from BE18
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Illustration 32: Own Illustration

nursery Marigold linoleum Made with Twinmotion

Bibliography

Books

Grafe, C. et al. (2018) Orphanage Amsterdam building and playgrounds. Amsterdam: Architectura & Natura.

Title page

Department of Architecture, Design & Media technology

Title Stenlængegaard

Theme Sustainabel daycare center

Project period 1 st February 2024 - 31 May 2024

Group MSC04 group 15

Semester 4th semester of Architecture Thesis

Primary supervisor Tenna Doktor Olsen Tvedebrink

Technical supervisor Kai Kanafani

Pages 135

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Abstract

The purpose of this thesis is to design a proposal for a new sustainable daycare center in Næstved which takes in consideration of environmental sustainability and social sustainability as design drivers. The focal point of the proposal is cantered around designing in the children scale to enhance the children's capability to evolve within their own social and developmental skills all with the environmental sustainability in mind.

The methodology behind the proposal is supported by Lawsons problem solution space (Lawson, 2005) with a focus on how the quantitative and qualitative investigations can support and enhance

the design process. To gather the right knowledge methods like interviews, life cycle assessments, desk-top analyses like microclimatic analysis, academic readings, case studies, sketching and physical model making all helped to develop the project and design proposal.

The proposal is visualized through different drawings such as plans, sections, construction details, elevations, diagram, text and renders. In the end the architectural atmosphere and material choices and functional programming is reflected and concluded upon.

Reading guide

The thesis unfolds through a structured program, beginning with an introduction that establishes the research topic and the specific problem it addresses. This is followed by a detailed examination of the project's context through a two-pronged approach. First, the problem field is thoroughly analysed, providing relevant background information. Second, the site itself is meticulously evaluated, considering its unique characteristics and any constraints it may present. During the two approaches design solutions have been developed to translate the knowledge gained into architectural form and principals. This design solutions are showed on the blue pages during the first step in the idea development.

Drawing upon these analyses, the thesis then delves into the exciting realm of idea development. This section explores a multitude of design solu-

tions, investigating the potential of various materials, room programming strategies, and desired room functionalities. Critically, the evaluation of these solutions is not confined to a single dimension. By employing both qualitative and quantitative research methods, the thesis strives for a more holistic and well-informed design proposal. Decisions in this part of the process were made on the basis of assessments of what is most important in relation to the narrative of the project.

Finally, a **seperate folder** presents the culmination of the design proposal, highlighting its key features. The conclusion then revisits the problem statement, summarizing the key findings. It goes beyond problem-solving, by reflecting on the project's broader significance. The concluding section explores how the proposed design contributes to the field of contemporary daycare building design.

Terminology

'Vuggestuegruppe' is a nursery group with children in the age group 0-2 years

'Børnehavegruppe' is a kindergarten group with children in the age group 3-4 years

'Store børns gruppe' is a preschooler group with children in the age group 5-6 years

'Tvillingegrupper' is when two groups are placed together and sharing facilities like toilet, wardrobe etc.

'Fin garderobe' is a wardrobe for dry clothes and small personal stuff

'Grov garderobe' is a wardrobe for wet jackets and children's jumpsuits

'Liggehal' is a shed like room where children can sleep in manger or pram

'Motorikrum' is a gym like room for high activity level plays and for the children to run around

'Pædagogisk køkken' is a kitchen for adults and children to preparing food together.

'Nærdepot' is a small room close to an activity which is dedicated for storage.

'Alrum' is the main shared space in the daycare also called common room or area.

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PROLOG

Theme

Sustainability is becoming a paramount factor in contemporary building practices, influencing both design choices and construction materials. While the private sector has spearheaded initial experimentation in sustainable construction, the public sector is witnessing a growing demand for similar measures and a willingness to embrace innovative approaches. This shift is crucial for further progress towards a sustainable future.

This thesis investigates the design of sustainable daycares, specifically focusing on the integration of social and environmental sustainability considerations within the design process. By prioritizing both aspects, the thesis aims to create an environment that fosters the well-being of children and pedagogues while adhering to the new 2025 regulations on carbon emissions.

Motivation

The experience gained from working with daycare institutions during our internships inspired further work on investigating how daycare institutions for children can be both socially and environmentally sustainable at the same time. The social sustainability is shown as the user's needs and wishes in the tender material and through the different design processes in the industry, the emission of CO_2 is very influential compared to the social sustainability.

With the new rules and legislations for sustainability in new daycare institutions also comes a responsibility in not forgetting the users. Quite quickly it could become a process that is based on checking of different factors to fulfil them, without considering the end users. An example from working with projects in practice is the short amount of time set for the design process. This made it become a checklist of all the quantitative information that where easy to incorporate into the design. This led to the qualitative information being neglected.

The motivation for this thesis is to figure out how to combine qualitative and quantitative data into architecture that creates spaces that demands for wellbeing of the user combined with complying to the sharpend environmental legislations.

Initial problem

"How can the building design of the next generation of **Daycare centers** take into consideration the **wel-lbeing** of children and pedagogues in a **socially sustainable** manner, while still being **environmentally sustainable**?"

Initial studies

An investigation of the scope, cases and legeslations surrounding the problem field, as well as the methology of the project.

Analysis

An investegation of the site and its surroundings as well as the definition of the project users.

FRAMING THE PROBLEM



New district



City center Næstved

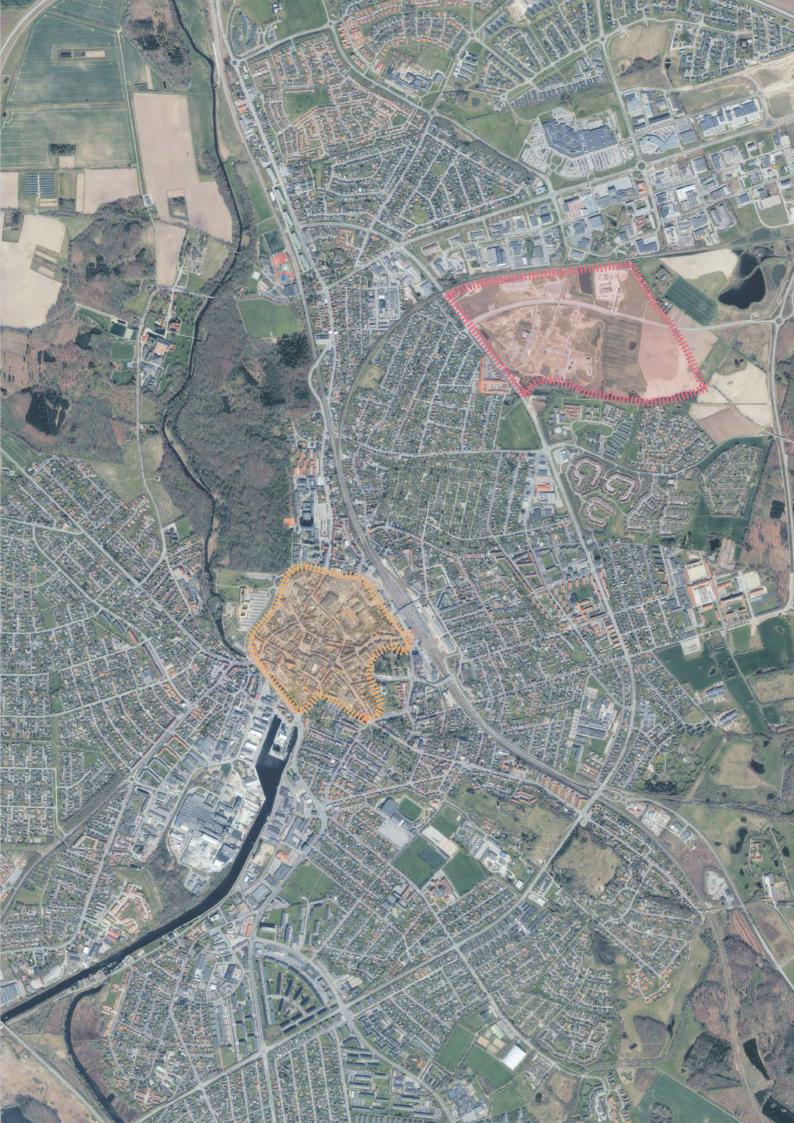


Location

The location is the southern part of Sjælland in the city Næstved. Næstved has a population of 84.768 (Larsen, 2024). It is thereby one of bigger cities on Sjælland. Næstved is branding themself on being the city for kids. They have a lot of opportunities for kids up to 15 years old. They have kindergarten concerts, family concerts, children's culture festival and children's theatre. Besides they also have a mascot and many local sports associations. There is also beautiful nature and many cultural activities. (Frandsen, 2023)

The location is found northeast of the city center. It is part of a brand new developing ground of the city with residential areas and new education opportunities. (Center for plan og miljø, 2021)





Tender study

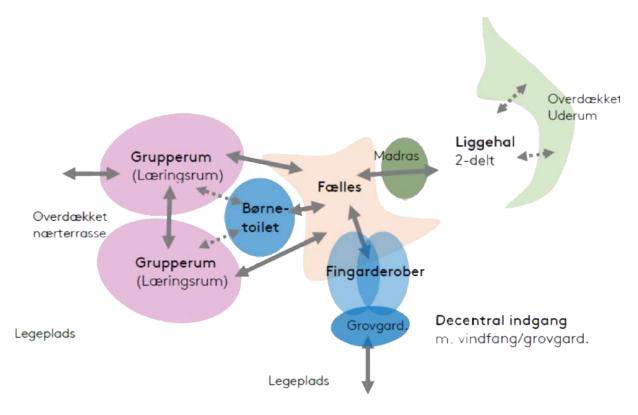


Illustration 03: Illustrations from tender material (RUM, 4. Funktionsprogram, Stenlængegård Daginstitution 2023)

This research project investigates the optimization of daycare design within the pre-defined parameters established by a turnkey competition's tender documents of a new daycare center in Næstved (RUM, 4. Funktionsprogram, Stenlængegård Daginstitution 2023). Recognizing the inherent tension between adhering to mandatory client requirements and pursuing innovative design solutions, this thesis adopts a user-centered approach to refine the provided room program and function diagram.

Tender documents in turnkey competitions typically outline many client-defined "must-haves" that serve as essential prerequisites for project

eligibility. While respecting these established directives, this project seeks to identify opportunities for optimization within the prescribed framework.

The study acknowledges the importance of both user well-being and regulatory compliance. User involvement with daycare institutions and kindergartens in Aalborg will provide valuable insights into child development, staff workflows, and community needs. These insights will inform the optimization process, ensuring that the design aligns with the holistic well-being of children and staff while adhering to relevant regulations, such as those outlined in the Danish Building Regulations (BR18) which is investigated further in the thesis.

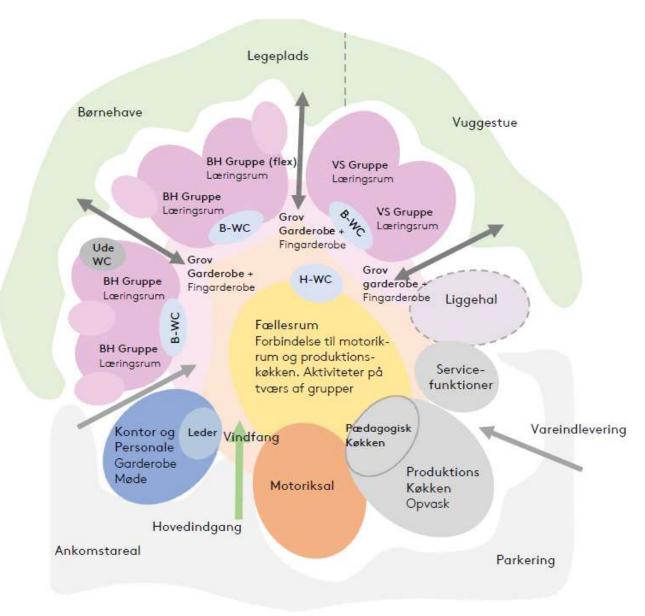


Illustration 04: Illustration from tender material (RUM, 4. Funktionsprogram, Stenlængegård Daginstitution 2023)

Information used from (RUM, 4. Funktionsprogram, Stenlængegård Daginstitution 2023)

- Functional diagram
- Site boundaries and building plots
- To some extent the predefined inventory needs and wishes

Information used from (RUM, 6. Rumskemaer, Stenlængegård Daginstitution 2023)

Room program

Design solution space

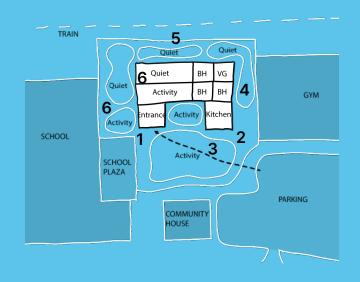
Tender

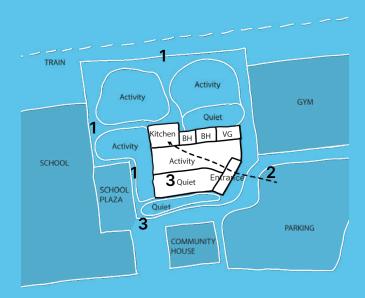
вн group room

Ideration 1

PROS

- 3. Connection between parking and entry creates a slow and safe transition
 4. Space towards the closed gym facade





Ideration 2

PROS

CONS

Ideration 3

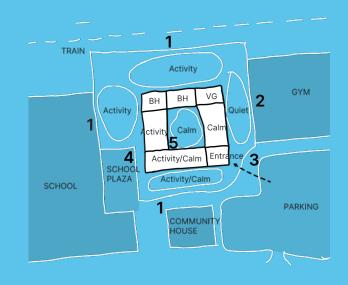
Building - Center

PROS

- Activities towards social and noisy surroun-
- Space towards the closed gym facade

CONS

- Transition between building and school plaza
- Calm and activity interfering with each other



VG

group room

Activity

Playgrund areas Common area

Calm

Flexible space Common area

Quiet

Out and indoor sleeping area Areas for immersion

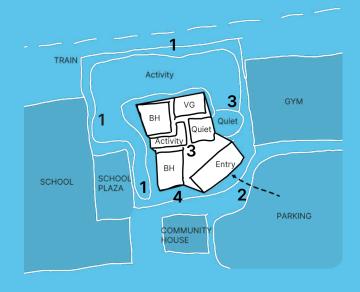
Ideration 4

Outdoor - North

PROS

- Activities towards social and noisy surroun-
- Short distance between parking and entrance

CONS



TRAIN ВН Quiet ВН VG GYM Quiet 6 Activity ntranc ntrai SCHOOL **PARKING** COMMUNITY

Ideration 5

Outdoor - Center

PROS

- creates a good spot for quiet activities
 Direct access from group- and activity rooms
 to outdoor activity

- Quiet and activity interfering with each other

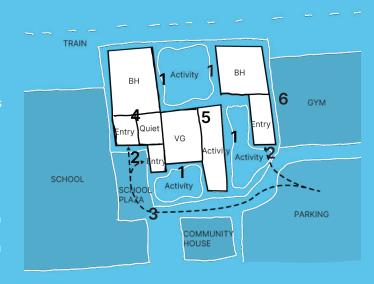
Ideration 6

Outdoor - Divided

PROS

CONS

- Building towards school and gym (facade



Problem field

The interplay between sustainability factors

The nexus between human well-being and the design of our inhabited spaces has been extensively explored through various lenses, including tectonics (Sántha et al., 2022), aesthetics (Galindo & Rodríguez, 2000), atmospheres (Duff, 2015), and the recent addition of neuroarchitecture (Assem et al., 2023). As the understanding of climate change solidifies, new and increasingly stringent demands are placed on the built environment across all facets of sustainability: economic, social, and environmental (Forsyningsministeriet, 2014). In Denmark, this has manifested in a shift from solely focusing on low-energy buildings (Social- og Boligstyrelsen, 2006) to incorporating Global Warming Potential (GWP) considerations throughout the entire building lifecycle (Industri, 2022). While these quantitative solutions yield demonstrably positive environmental outcomes, the question regarding their impact on the lived experiences within these spaces, particularly in relation to social sustainability, remains unanswered (Larsen et al., 2022).

Emerging concepts like Social Life Cycle Assessment (S-LCA) (Larsen et al., 2022) further emphasize the multifaceted nature of sustainable development and herald demands for more holistic assessments. Certifications like Deutsche Gesellschaft für Nachhaltiges Bauen (DGNB) play a crucial role in promoting sustainability across all construction phases and aspects, moving beyond the confines of purely environmental considerations (Bæredygtigt Byggeri, Kort om DGNB).

Social sustainability is defined by qualitative data and is therefore much more specific to the site and project than environmental and economic sustainability. S-LCA is an attempt to quantify social sustainability into something measurable. In this thesis the S-LCA is looked at as an inspiration to how social sustainability could be combined with environmental sustainability.

Our built environment's design is becoming increasingly complex regarding balancing environmental, social, and economic factors. While significant progress has been made in reducing the environmental impact of buildings through regulations and certifications like DGNB, the social sustainability aspect remains under-researched. Emerging concepts like S-LCA emphasize the need for a holistic approach that not only considers the environmental footprint but also evaluates the social impact of buildings on occupants and communities. This comprehensive approach is necessary to create truly sustainable built environments that prioritize both environmental performance and the well-being of those who inhabit them.

Problem statement

"How can the building design of the next generation of **Daycare centers** take into consideration the **well-being** of children and pedagogues in a **socially** sustainable manner, while still being **environmentally** sustainable. How can we ensure continued flexibility in relation to **speciality**, **materiality**, and **functionality** to accommodate future functions and users of the building, all while adhering to the stringent GWP regulations of 12 kg CO2/m² per year or less?"

Method

This thesis delves into this complex problem area through the lens of theoretical writings in architecture, pedagogy, and both LCA and S-LCA frameworks. Inspiration will be drawn from tender materials in Næstved, alongside microclimatic and functional analyses, to inform the definition of users, function diagrams, and room programs, ultimately culminate in the formulation of comprehensive design criterias.

It is important to take into consideration what methods and tools that are being used working with architecture and engineering combined. This to obtain the highest quality of architecture that will last long and creates a good environment for the users. (Heiselberg, 2007). It is especially important when working with designs for the future.

"The designer has a prescriptive rather than a descriptive job. Unlike scientists who describe how the world is, designers suggest how it might be. Designers are therefore all 'futurologists' to some extent." (Lawson, 2005)

Lawson's problem solution space seeks to deal with the fact that a design process is a linear process. His take is that the problem can appear from the different phases. It can appear from an issue and at other times the problem will first appear after the initial analysis is made. The process becomes a collection of different phases that go circular. These phases are analysis, Synthesis, and evaluation. They inform each other throughout the process. (Lawson, 2005)

Achieving an optimized design process and solution, would be to incorporate both divergent and convergent thinking as a mix and thereby achieve a holistic approach. This will narrow the process when needed and make the process more manageable. As shown in the illustration Lawson works with problems through solutions and the opposite. The problem and solution are fitted together by the phases that creates a connection between them. This is without working with them chronologically. (Lawson, 2005)

Some of the phases between the problem solution space consist of analysis, synthesis, and evaluations which then consist of different types of tools or methods that can be divided into qualitative and quantitative information.

Qualitative and quantitative information

Another method used is the use of qualitative and quantitative data which are held up against each other. The qualitative information collects data about things that cannot be measured, such as language and things that are observed. In this project the qualitative data will be colected throug user involvements and interviews. Quantitative information is data and information that can be measured such as numeric data. In this project the quantitative date will unfold from the LCA calculations. The quantitative facts are often more generic and faster and can therefore get the project going whereas qualitative information takes time to collect, analyze, and synthesize. A combination of both qualitative and quantitative information complements each other and together they help the process to achieve more thorough results that are based on both experience and numerical facts. (Mcleod, 2023)

Through the different phases different methods are incorporated to ensure that the process gets as informed as possible.

Interview

Interviews are made to obtain information about the user groups. These are made in collaboration with 2 different kindergartens and a daycare center. The aim is to get to know how their everyday life unfolds and if they have any issues or solutions that works well for them. Things like room programming, functions that are missing or indispensable. This is to get an understanding of how life is in a daycare center compared to how academic and white papers describe it. Achieving the qualitative knowledge that informs about how their feelings and experiences are.

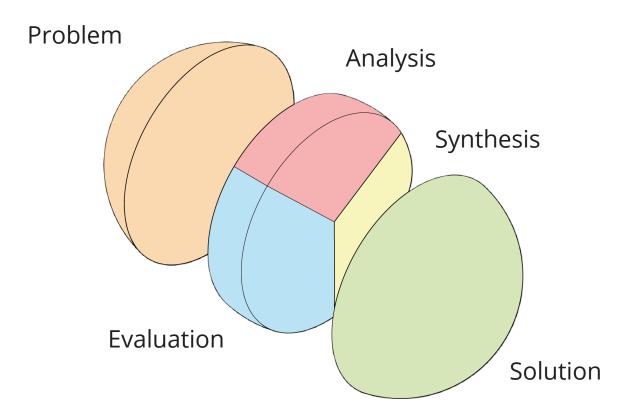


Illustration 07: Own illustration Problem solution space inspired by B. Lawson

Literature

Literature is used for gaining background information on the profession and the connections between architecture and children that help bring an understanding to the project. It is used to search for knowledge about the historical evolution of kindergartens what the future will bring and what factors (such as interior, programming, and functions) are important to take into consideration. With a mix of academic literature and white papers, both theoretical and practical knowledge is gained to inform the process towards a more knowledge-based process.

Design studies

Throughout the design development process, various research methodologies are employed to refine the concept and guide its direction. Studies serve multiple purposes: they offer insights from different perspectives, allowing for comprehensive exploration of the design space, and track the overall direction. This process employs a hierarchical structure, with main studies encompassing smaller subordinate studies. This approach facilitates the investigation of the same design area from both quantitative (LCA-byg assessment) and qualitative (user involvements) perspectives.

In the realm of design development, several key studies inform user involvement, life cycle assessment (LCA), and the creation of effective solutions. These include: LCA-scenario comparison, Sectional volume studies, and Perspective and scale studies related to children. By incorporating these diverse studies, the design process gains valuable insights from various angles, ultimately leading to solutions that are environmentally conscious, functionally efficient, and inclusive for users of all ages.

In the crucial stage of problem framing, diverse methods shed light on the design challenge and its potential solutions. These methods offer a multifaceted lens to understand the context and needs at play: Storyboards, personas, Legislation studies, case studies, and microclimatic condition mapping. By weaving together, the insights from these diverse methods, problem framing becomes a rich tapestry of understanding. This holistic approach equips designers with the knowledge and empathy to tackle challenges effectively, creating solutions that are user-centric, legally sound, and environmentally responsible.

Studies

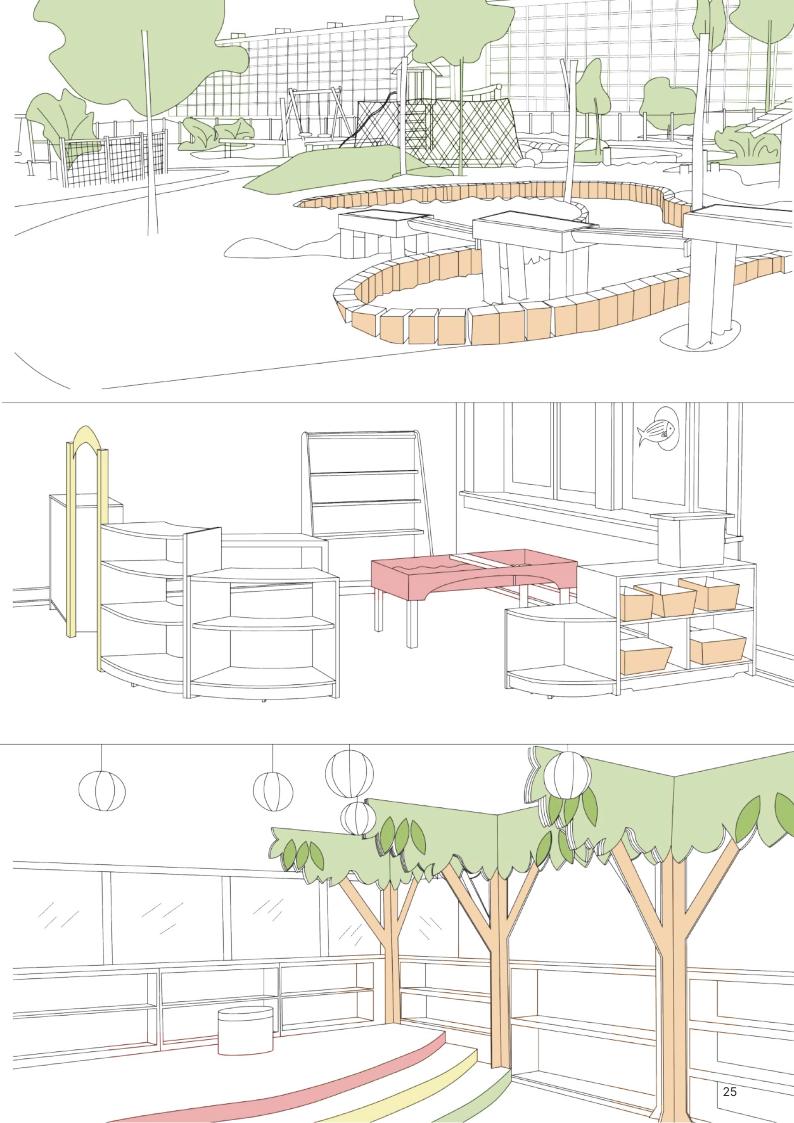
Typology

The typology of contemporary daycare institutions has evolved to become a place where children's cognitive, social, and emotional skills are developed in a safe and positive learning environment (Coninck-Smith, 2012). This development has led to an increased focus on all ages, with institutions offering both kindergarten and nursery places to cater to the needs of children aged 0-6 years (Ringsmose & Staffeldt 2023). Additionally, the transition from nursery to kindergarten is expected to be smooth and seamless to ensure the safety and well-being of all children. (Appendix 1-3) interview

The design of contemporary daycare institutions is expected to be inviting and functional, with spaces for both play and learning. The building's design should indicate its use as a daycare, and the institution must provide a variety of indoor and outdoor spaces that cater to different learning styles. Furthermore, play is considered a crucial part of the child's learning process, and institutions should support a learning environment that promotes play and facilitates the early development of cognitive, social, and emotional skills. (Ringsmose & Staffeldt 2023)

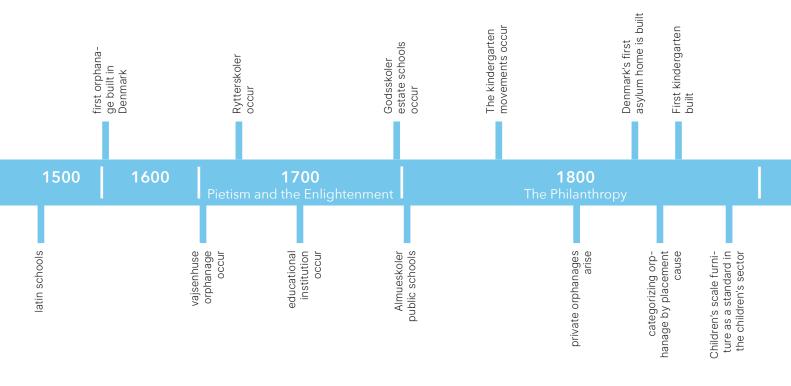
Examples of typologies in contemporary daycare institutions include nature-pedagogical daycare, which focuses on outdoor life and science education, the Reggio Emilia-inspired daycare (Lange, 2006), which emphasizes creativity and aesthetic learning, and Montessori-inspired daycare (Guiden, 2023), which focuses on independence and practical learning. Despite the differences in typologies, all daycare institutions offer a safe and caring learning environment that supports the early development of a child's potential.

This thesis focuses on sustainability in social and environmental aspects, and as such, contemporary daycare is defined as a building that promotes play and learning through spatial diversity and flexibility. From the abovementioned definitions of daycares, this thesis defines daycare as inviting, functional, and providing a homely feel, with a design that signals its purpose. This definition is most closely aligned with the Montessori daycare, which emphasizes independence and practical learning, but our definition has an extra layer of sustainability and if possible, the daycare can be used as a tool for the children to learn about sustainability.



Theory

Architectural History



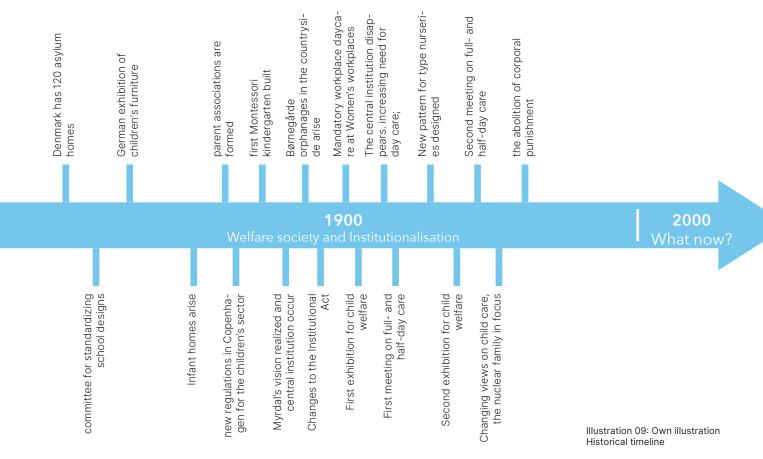
With point of departure in "Barndom og Arkitektur" by Ning de Coninck-Smith, this study examines the evolution of children's environments in Denmark between 1500 and 2000, reflecting on the changing societal perspective towards them. Initially seen solely as future workers, children gradually gained recognition as individuals with unique needs for care and development. This transformation impacted both childcare norms and architectural design.

Early Views (1500-1800s):

This period was characterized by the view of children primarily as future laborers. Converted monasteries served as the initial childcare institutions, with the first dedicated building constructed in the 17th century under King Christian IV. The 19th century saw the emergence of kindergartens alongside growing scrutiny of children's placement, leading to categorizations based on specific circumstances like orphanhood or criminal family backgrounds. (Coninck-Smith, 2012)

Shifting Priorities (1900-1950s):

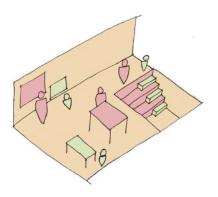
The 20th century marked a pivotal shift. Committees established model designs for child-sized schools in rural areas, recognizing the importance of tailoring spaces to children's needs. Exhibitions showcasing furniture inspired by Maria Montessori's influential sensory-based pedagogy began appearing, reflecting a growing focus on child development. By the 1930s, parent associations emphasized the critical role of mothers, particularly in early childhood. This led to discussions surrounding centrally located kindergartens in social housing areas, while rural counterparts incorporated elements like agriculture and animal husbandry into their programs. The increasing participation of women in the workforce throughout the century further fueled the need for daycare facilities. This culminated in legislation requiring workplaces with predominantly female workforces to offer on-site childcare in 1945. (Coninck-Smith, 2012)



Individuality and Play (1960s-2000): From the 1960s onwards, a significant shift in child-rearing philosophy occurred. Institutions gradually moved away from viewing children as miniature adults and began recognizing them as individuals. This, combined with improved conditions and the abolition of corporal punishment in 1970, paved the way for a surge in diverse and innovative child-centered architecture. Playful learning environments replaced the previously dominant disciplinary spaces, prioritizing well-being and personal development over traditional values like strict discipline, duty, and hygiene. (Coninck-Smith, 2012)

This historical analysis reveals a dramatic change in the value society placed on children. Their perception transformed from primarily future laborers to individuals with unique developmental needs. This shift was accompanied by a parallel evolution in pedagogical approaches, moving away from coercion and punishment towards fostering play and learning.

This study paves the way for further exploration of how play, furniture design, and materiality contribute to creating nurturing and effective environments for children in the future. Through additional research, such as interviews and user involvement, we can gain deeper insights and build upon the valuable lessons learned from history.



Design the interior within the children scale to encourage the self-reliance of the children

Illustration 10: Own drawing. Bulletpoints history

Case study

Orphanage

Location: Amsterdam

Year: 1960

Typology: Orphanage

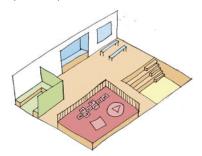
(Grafe et al., 2018)

Analysing and researching the orphanage designed by Aldo Van Eick is set to provide an understanding of how he manage to create a home for children and what aspects that made it a home.

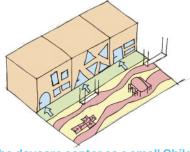
"A House must be like a small city if it's to be a real house; a city like a large house if it's to be a real city? In fact, what is large without being small has no more real size than what is small without being large. If there is no real size, there will be no human size." (Grafe et al., 2018)

Aldo Van Eyck designed the Orphanage in Amsterdam. It was an orphanage for children without parents and children who for different reason could not live at home. The building consists of 8 pavilions for 8 groups of children that were divided by their age and gender. These pavilions together with courtyards and patios are all connected by a hallway which symbolizes a covered street between the smaller pavilions. The idea behind it was to create a city for children, the different pavilions symbolized the homes of the children and the hallway connecting them where the street. On the street there where multiple activities such as sandpits, a play pond, play areas, rooms for special activities and fifty doors opening to the outside. All functions had a higher meaning a door was not just a door but a place for occasions that are made many times throughout a life. The children would meet each other in the hallways and the courtyards and play, together with having their own private "home" where they could be themself. Aldo Van Eyck created a little society for the children with spaces for privacy, publicy, and everything in-between. (Grafe et al., 2018)

Aldo Van Eyck's Orphanage creates spaces that embodies both meetings and privacy. By taking the philosophy of creating a home as a small city, Van Eick manage to create a society with multiple functions and spaces that affords all sort of activities, all within the walls. The patios create a place for the children to meet between the pavilions, the pavilions create a home and a place for being private, and the different activities in the hallway creates spaces where they can meet and play. Within the walls he creates both private, semiprivate, and public spaces.



Creating spaces that offer different levels of activities and privacy to allow the children to meet without interrupting others.



Design the daycare center as a small Children city

Illustration 12: Own drawings. Bulletpoints Orphanage

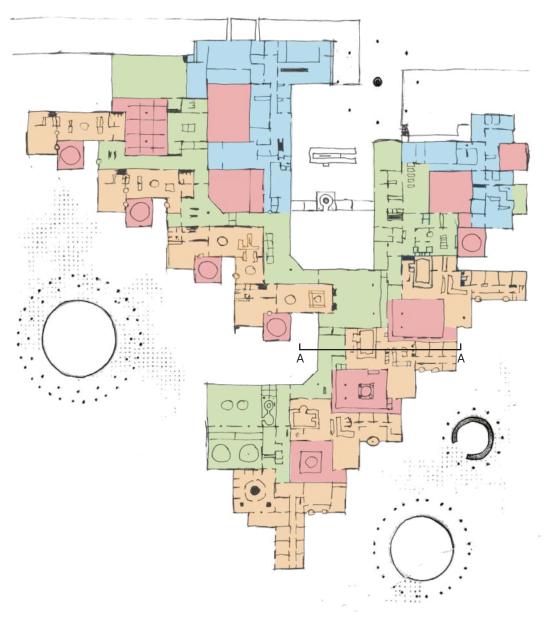


Illustration 13: Own drawing Zoning Orphanage



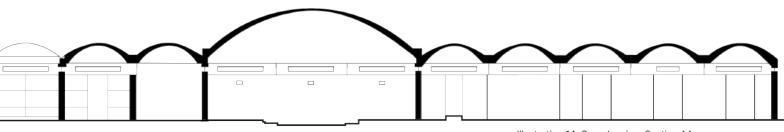


Illustration 14: Own drawing. Section AA.
Different heights decides the activity level inside

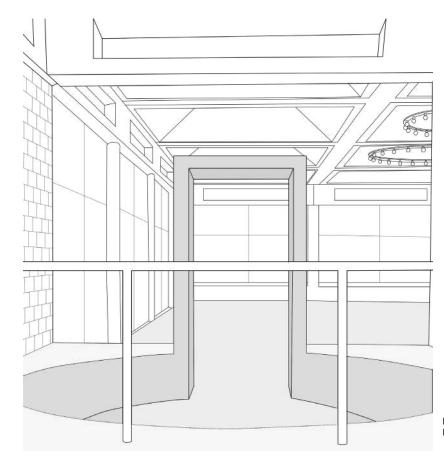


Illustration 15: Own drawing. Inside Play area

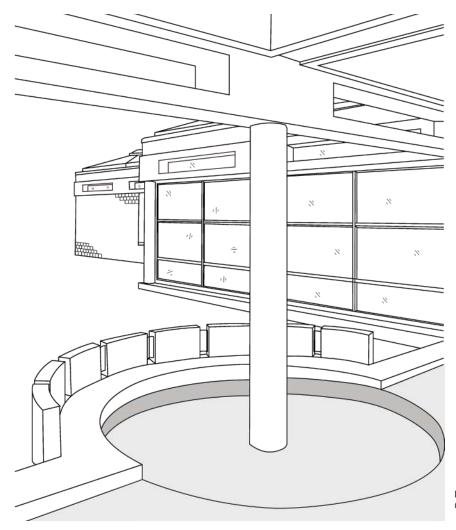
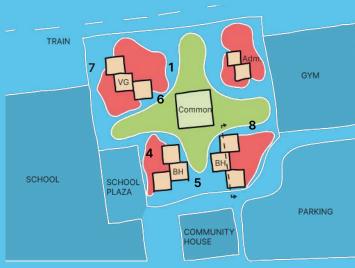


Illustration 16: Own drawing. Outside play area

Design solution space History





Ideration 1

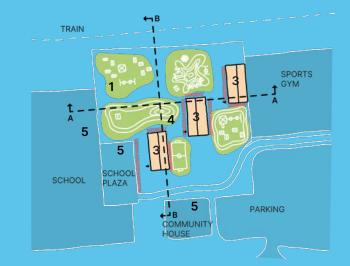
PROS

- Each group has their own entry
 The divisions of buildings create an affiliation

Ideration 2

PROS

- Playground divided into several areas with different play environments





Theory

Profession study

This study explores how modern pedagogical approaches and daycare environments interact to support children's learning and holistic development. It investigates how interior design and programming can optimize these practices, drawing on insights from (Ringsmose & Staffeldt 2023) and (COWI et al. 2010) to analyze diverse learning needs and design effective play environments for children's development.

The contemporary role of pedagogues in daycare institutions has undergone a significant evolution. Beyond the traditional focus on care and basic education, modern pedagogy emphasizes fostering children's learning, social development, and emotional well-being (Ringsmose & Staffeldt, 2023). This demands a more nuanced approach, equipping children not just with academic skills but also with the ability to navigate social interactions and understand their own emotions. While basic etiquette and politeness remain important, the primary emphasis shifts towards developing social-emotional intelligence through play-based learning. Children learn to communicate effectively and interpret the communication of others through collaborative play and exploration. This necessitates the ability to express themselves clearly and to understand and respond to diverse communication styles. (Ringsmose & Staffeldt, 2023)

The learning process is significantly impacted by the physical environment within daycare institutions. Diverse play environments can either promote or hinder children's learning depending on their design and configuration (Ringsmose & Staffeldt, 2023). Striking a balance between structured activities and open-ended exploration is crucial, allowing space for both guided learning and fostering children's natural creativity. (Ringsmose & Staffeldt, 2023)

This thesis seeks to find the right balance between room proportions, materials, and functions, as it seems to be important factors both in relation to the children's learning and the sustainability aspects of a building. Ways to do that could be creating rooms with different atmospheres that either affords one type of activity or multiple different activities. Examples could be the generic rooms with the same lighting and floor material that affords almost every activity and the playroom with robes, pillows angled floor and a climbing wall which affords one type of play. (COWI et al. 2010)

Furthermore, the needs and developmental stages of children vary greatly between toddlers in nurseries and older children in kindergartens. This necessitates diverse play environments tailored to different age groups, but also within each group to cater to individual interests and curiosities. (Ringsmose & Staffeldt, 2023)

For nursery children, the presence and attentiveness of pedagogues are paramount. From diaper changes and mealtimes to playtime activities, all interactions offer valuable learning opportunities through observation, repetition, and sensory experiences. This necessitates functional spaces that prioritize supervision, minimize distractions for pedagogues, and offer age-appropriate sensory stimulation. (Ringsmose & Staffeldt, 2023)

This thesis sees the interior design as an important factor for the nursery group rooms because of how it affects the children's ability to focus their attention on something or someone. The materials in these rooms must be simple to minimize the disturbances for the youngest children while still stimulate the older nursery children. It could also be beneficial to design the room as one big room where the pedagogues can form the settings for the children's different needs so that they can interact with more than one child at a time without the children having to do the same thing.

For kindergarten children, communication, language development, and social interaction become central learning themes. Through collaborative play and exploration, children hone their communication skills and learn to share effectively. This necessitates spaces that offer clear sightlines for

Situations that help children become more self-sufficient:

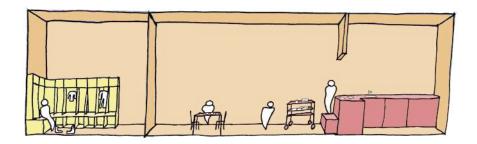


Illustration 18: Own drawing Architecture that helps children being more self-sufficient

Theory

Taking off and putting on clothes themsel

Working together to set the table

Clearing up after meals

Preparing fruit

Putting toys away

(Ringsmose & Staffeldt, 2023)



Architecture

Wardrobe

Access to kitchen or food wagon

Access to kitchen or food wagon

Kitchen

Storage in children size

Important functions in a daycare:

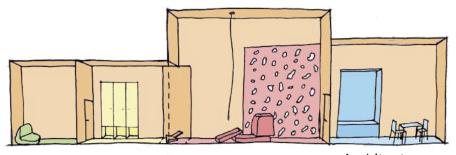


Illustration 19: Own drawing Different functions in a daycare institution

Theory

Many good small play areas where children and adults can meet for common play and activities

Good places for care and closeness

Oppertunities to divide into smaller groups or individually

Manageable environments

Places for peace and immersion

Places where you can express yourself physically

Places where you can explore and sense see and experience yourself

An aesthetic enviroment that is inviting sensual and stimulating for young children

(Ringsmose & Staffeldt, 2023)



Flexible rooms

Niche and smaller closed rooms

Flexible rooms

Group rooms

Smaller closed rooms

Activity rooms

Activity rooms

Group rooms



The meaning of colors for rooms:



Illustration 20: Own drawing Different colors for different room functions

Theory

Green has a calming effect

Red is stimulating

Yellow and orange are warm colors that encourage and stimulate.

Blue is a calming color

(Ringsmose & Staffeldt, 2023)



Architecture

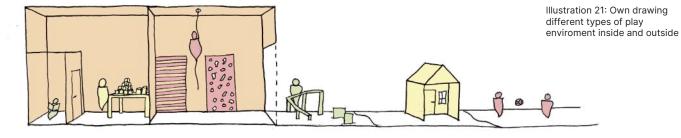
Quiet reading room

Activity room

Wardrobe, bathrooms, entre

_arger guiet rooms, sleeping rooms

Different forms of play:



Theory

Pretend plays

Shapes, colors, and puzzles

Water and sand play

Story reading, telling, and singing

Running games

Building games

Collecting games

Sensory play

Creative play

(Ringsmose & Staffeldt, 2023)

Architecture

play environments, group rooms, outside

Common areas, group rooms

Outdoor, science area

Quiet room

High activity areas/rooms

Building table, soft floor

Outdoor areas

Science area outdoor and indoor

Activity areas



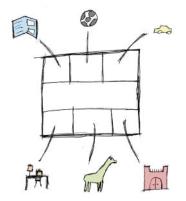


Illustration 22: Own drawing Different groups

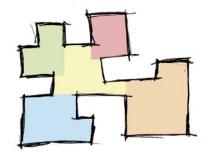


Illustration 23: Own drawing Divided by functions

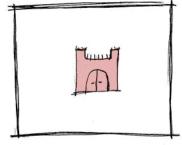


Illustration 24: Own drawing Daycare center with a theme

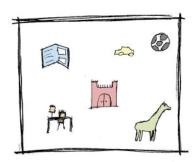
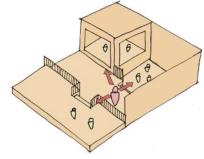


Illustration 25: Own drawing mixed daycare center



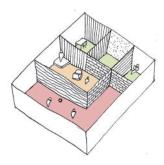
The rooms shall be programmed to allow indirect supervision of the children

supervision while also allowing for flexible arrangements to accommodate diverse play types simultaneously. Pedagogues require the ability to observe play from a distance without interfering, while also being able to intervene discreetly if necessary. (Ringsmose & Staffeldt, 2023)

This thesis sees play environments as an important factor for kindergarten children. The group rooms for the kindergarten children must be large flexible rooms that feature many small play environments which imitate real life situations. It is important that the division of the room must be on the children's level to enable the pedagogues to observe many plays at the same time without interruption.

Ways of organizing a daycare center is to create different overall concepts that the daycare center follows. These could be themes, functions, groups and plays as seen on illustration (22-25). (COWI et al. 2010)

This study highlights the complex and evolving role of contemporary pedagogues in daycare institutions. Their responsibilities go beyond care and education; they must effectively nurture children's learning, social development, and emotional wellbeing. As Ringsmose & Staffeldt (2023) emphasize, children of different age groups within daycare have distinct learning needs and require diverse play environments. This study lays the groundwork for further investigating the specific design features and programming approaches that best support contemporary pedagogy in daycare institutions. By bridging the gap between contemporary pedagogy and its physical environment, we can create daycare institutions that truly empower pedagogues and nurture the holistic development of all children.

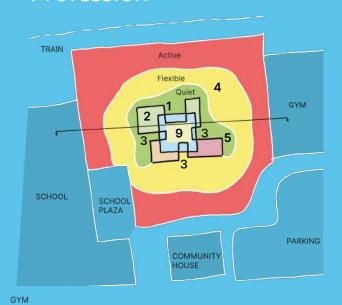


Create spaces with active and relaxed environments through room sizes and materials.

Illustration 26: Own drawings. Bulletpoints profession

Design solution space

Profession



Ideration 1

Building - Windmil

PROS

- The shape of the building creates small transition zones from inside to outside
- Room size and functions corespond to each other
- 3. Multiple entries
- 4. Fluid transition in outdoor play environments
- Quiet seperated from activities
- 6. Responds to the surrounding building heights

CONS

- 7. Large building envelope
- 8. Infrastrucutre inside the building
- The building does not relate to the surroundings



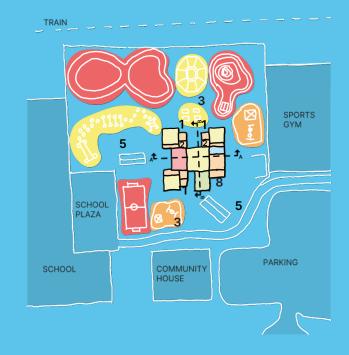
Ideration 2

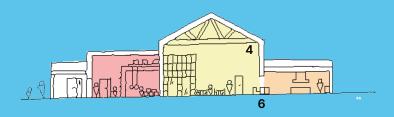
Building - Compact

PROS

- Group rooms and administration has its own
 entry
- No direct access from high activity to low activity
- 3. Multiple smaller outdoor play environments
- 4. Room Proportions reflects the function
- Outdoor building facitlities divides the outdoor areas into smaller spaces

- 6. Access between group rooms and common areas
- 7. Missing quiet outdoor area
- Kitchen and quiet room are placed beside each other







Theory

Sustainability

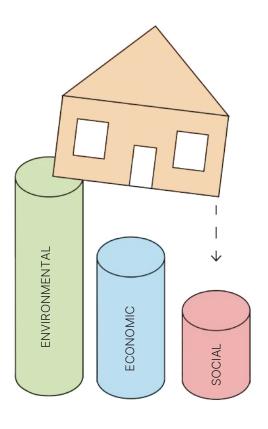
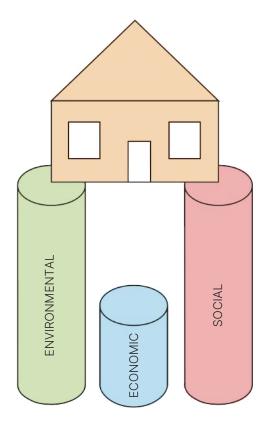




Illustration 28: Own illustration Illustration on how the sustainability pillars are weighted in the project



Sustainability balance

Sustainability is a lot more than just environmental sustainability. There are three pillars and environmental sustainability is only one of them, the two others are social- and economic sustainability. Due to climate change is environmental sustainability taking all the focus, but the economic and social aspects are just as important. (Larsen et al., 2022)

Environmental sustainability uses tools like Life Cycle Assessment (LCA), economical sustainability uses tools like Life cycle costing (LCC) and a

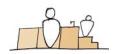
tool called Social Life Cycle Assessment (S-LCA) is being developed to use for social sustainability. (Larsen et al., 2022)

The target of this thesis is to work with LCA and our take on S-LCA to incorporate both quantitative (LCA) and qualitative (S-LCA) knowledge into the design. This to seek a better solution on how to incorporate them both equally and without compromising any of them too much. It means that the economic sustainability is not taking into consideration in this thesis.

Social sustainability

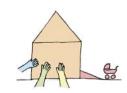
Social sustainability ensures individuals' wellbeing and considers qualitative aspects that are not easily measured. It is a crucial pillar of sustainability, ensuring designs meet certain standards beyond the quantifiable (Larsen et al., 2022). As stated in the problem, the main topics, that is looked into is materials, the programming of the rooms and the room properties. Therefore, it is necessarily to look into the associated aspects under those main topics.

The associated aspects that are looked into is:



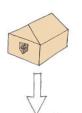
Equity

All people should be allowed to have the same equity and should not be discriminated because of how they are. (Eklova, 2020)



Inclusivity and accessibility

It shall be accessible and open for all regardless of disabilities and social groups. (Eklova, 2020)



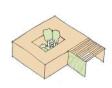
Flexibility

The design should be adaptable and flexible, to accommodate different functions in the future. This will ensure a longer lifespan and lower economic investments needed. (Eklova, 2020)



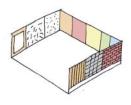
Using exterior space

Utilizing and designing a quality outdoor space for the building users supports their wellbeing and encourages to more social interactions. (Eklova, 2020)



Comfort and wellbeing

Comfort and well-being are linked to both physical and mental health. They are subjective criterias of the users and can be improved in various ways, examples could be calm relaxing areas and applying greenery inside. (Eklova, 2020)



Aesthetics

Both the aesthetic quality on exterior and interior walls and facades has an impact on the neighbours and user. It has an impact on the lifespan of the building and is in lower risk of being demolished after use. (Eklova, 2020)



Function and usability

The function of the building is the reason for its existing, it is there to fulfil the needs for the owners and the users of the building. The usability of the building is measurable and tells how well the design fulfils the needs of its users. It is defined by effectiveness, efficiency and satisfaction. (Eklova, 2020)



Functional mix

The functions in the building should be diversified to fulfil the needs of users and building owners. (Eklova, 2020)

Illustration 29: Own drawings Drawings of social sustainability aspects

Case study

Kindergarten Karolinelund

Location: Karolinelund park, Aalborg

Year: 2017

Area: 850 m2

Typology: Kindergarten

DGNB Platin Certified (Karolinelunden 2023)

Karolinelund kindergarten is the first daycare center with DGNB Platin in Denmark. This ranking is the highest DGNB ranking possible. Therefore, it is interesting to look further into what made it get this ranking. How did they manage to take in consideration of the users and the co2 emission at the same time.

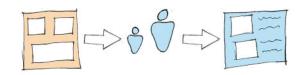
Karolinelund Kindergarten is designed for just under 100 children. The kindergarten is design with three main boxes that are connected to a common room. Two of the boxes contains the group rooms and their wardrobe and the last contains the administrative facilities. The common room works as a play and gathering room where the children will meet, play, and learn. (Karolinelunden 2023)

Their group rooms are divided into 3 parts one big room and to smaller rooms to create spaces for different kind of activities and also visibility for the pedagogues. Together with the shared room this works as different rooms where different age groups can play both together but also individualy without interrupting others. (Appendix 1-3)

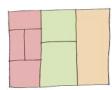
The users were an active part of the design processes from the beginning to the end. It means that the kindergarten is specifically design for their needs and wishes. All of them were accomplished except for the placements of the depots and a folding door in the meeting room. this means that the pedagogues learning strategies are mirrored in the architecture. The most important functions are exactly what the users want. In this case the user was the expert in the kids and pedagogues' wellbeing (Appendix 1-3). The user expert knowledge combined with expertise about environmen-

tal sustainability created a design that accomplish both being social sustainable and environmentally sustainable.

Researching Karolinelunden Kindergarten has given lots of information about how important it is to incorporate the user in the different design processes. It is important to listen to the end user and their experiences from working in different environments. It is important already from early stages talking together about what the aim is and what is possible to achieve. The qualitative data is indispensable and without it is easy to check some boxes of that may compromise the wellbeing of the users but gives a better and smaller emission of co2. This has given starting point in further investigation on how to incorporate social sustainability into the design process and how important it is. This will be used further on in the process as a comparison to the quantitative data and by that create a more informed design.

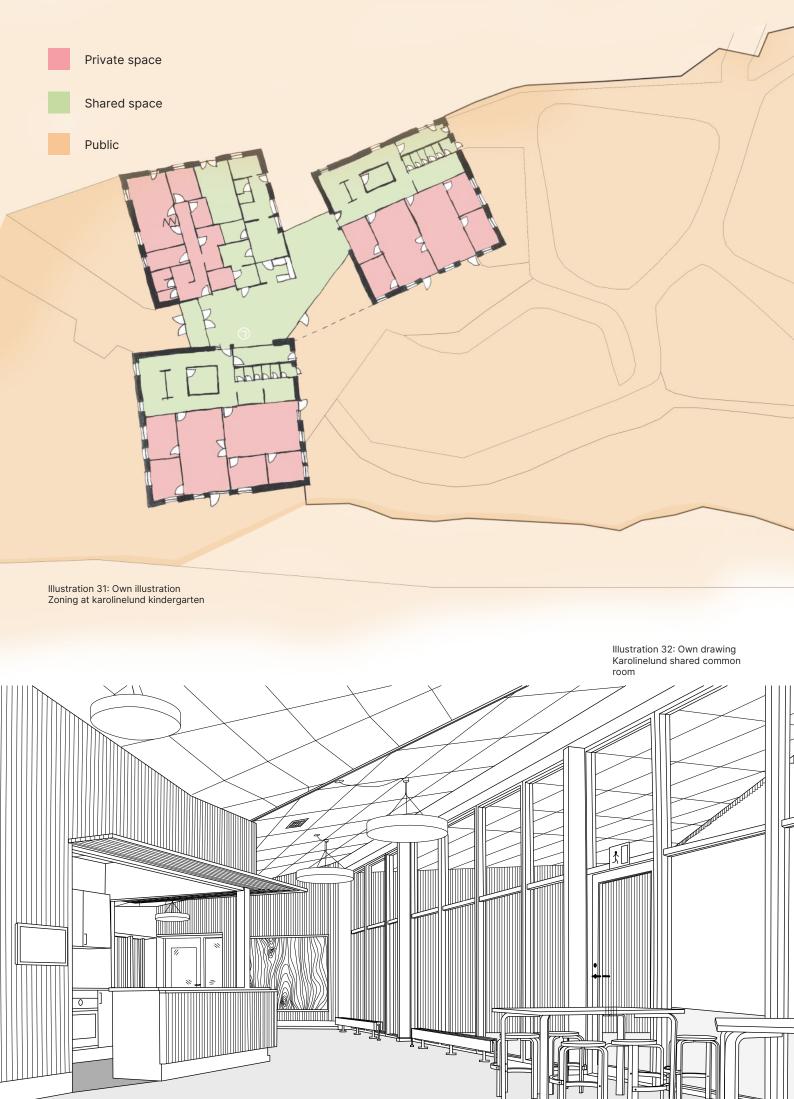


Involve the user in the design process, through feedback for different design solutions.



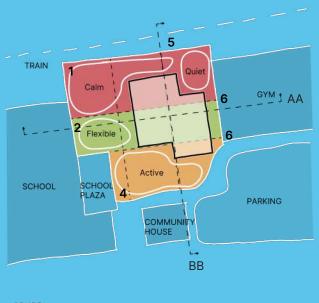
Defined zoning between private, Shared and public

Illustration 30: Own drawings. Bulletpoints Karolinelund



Design solution space

Social sustainability



Ideration 1

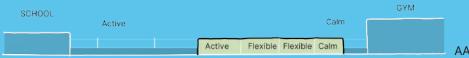
Building - Public to private

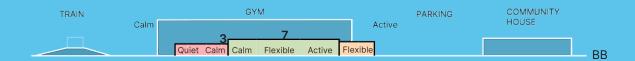
PROS

- Private spaces are located furthes away from the social spaces
- Active and quite spaces are seperated by flexible spaces
- 3. Room proportions reflects the level of privacy
- 4. outdoor play areas are located towards the active social surroundings

CONS

- 5. Quiet and calm area towards railway
- 6. Highly Defined zones
- 7. Common rooms in risk of being pass through





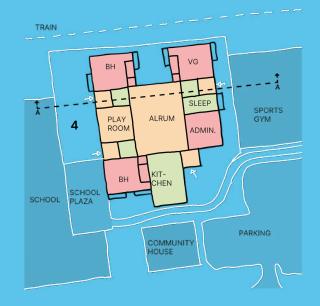
Ideration 2

Building - Raised playground

PROS

- Transition between public, common and private
- 2. Playground on top of building
- Seperation of private and shared outdoor play areas

- 4. No playground on ground level
- Daylight inside the large shared room
- 6. Access to outdoor toilet





LCA

LCA is an assessment used to qualify and compare different building constructions' Global Warming Potential (GWP) during a 50-year lifespan. It investigates different stages such as production, construction, use, end-of-life as well as in some cases outside projects (disposal, recycle and reuse). It considers the Co2 emission from all processing through the stages like extraction, transport, processing, assembling dismantling, etc. (Bygningers Klimapåvirkninger, 2023)

As part of efforts to reduce carbon emissions, Denmark has introduced new regulations concerning GWP. These regulations took effect in 2023, requiring all new constructions over 1000 m2 to maintain a GWP of under 12 kg $\rm CO_2/m^2$ per year. This regulation will also encompass new constructions under 1000 m2 by 2025 and for now there is a voluntary class on 8 kg $\rm CO_2/m^2$ per year. (Klimakrav (LCA) I bygningsreglement). This is crucial for the project as there is a desire to create an environmentally sustainable Daycare center. Failure to meet the requirements would render the design irrelevant now and in the future.

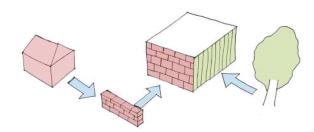
The global discourse on environmental sustainability hinges on the "5Rs" principles of Refuse, Reduce, Repair, Reuse, and Recycle. While LCA, a quantitative tool based on material and energy flow, serves as a valuable framework for evaluating a product's environmental impact. Its traditional "cradle-to-grave" approach falls short in fully accounting for the afterlife of materials, particularly in building construction. (Larsen et al., 2022)

The current LCA methodology, relying on static and quantitative indicators, primarily assesses material properties without considering spatiality, functionality, or materiality. This leads to underestimating the potential benefits of materials with extended lifespans or biobased materials. (Larsen et al., 2022)

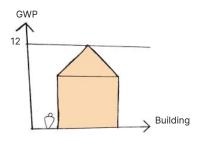
Braungart and McDonough (2002) challenged the prevailing "minimize-and-dispose" mentality in the building industry, advocating for the Cradle-to-cradle (C2C) concept. This vision encompasses products designed for infinite reuse without further processing or biobased materials that decompose into nutrients for new growth, effectively eliminating waste. (McDONOUGH & BRAUNGART, 2002)

The growing trend of design for disassembly (DfD) in sustainable Danish buildings aligns with C2C principles as argued above. However, traditional LCA methods struggle to capture the full advantage of DfD due to potentially higher initial GWP despite long-term benefits from material reusability. (Rasmussen et al., 2019)

This thesis aims to delve deeper into the environmental impact of biobased, reused, and upcycled materials in building construction. By intentionally opting out of the DfD framework, the research allows for a focused exploration of material properties and their social sustainability implications.



Base the design on use of biobased, reused or upcycled materials.



Keep the GWP under 12 kg/co2/m2/year Illustration 34: Own drawings. Bulletpoints LCA

S-LCA

While LCA comprehensively evaluates environmental impacts, understanding social sustainability in the building sector remains a complex challenge. Social Life Cycle Assessment (S-LCA) emerges as a potential tool that tries to implement social aspects into the Life Cycle Sustainability Assessment (LCSA). The S-LCA takes the social and socio-economic aspects of services into account by assessing the potential impacts along the 50-year lifespan of the building. However the S-LCA method suffers from the lack of a standardized methodology, limiting its widespread adoption. (Larsen et al., 2022)

This thesis addresses the critical gap between the quantitative and qualitative measures by exploring the complexities of S-LCA in the building context. It highlights two key challenges:

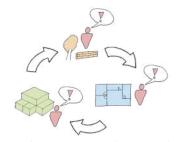
1. The Qualitative Nature of Social Sustainability

Social aspects inherently vary with context and stakeholders, making "plug-and-play" methodology application across diverse projects impractical. Additionally, the varied interpretations of "sustainable behavior" and focus areas further complicate the development of universally applicable methods. (Larsen et al., 2022)

2. Absence of Integration with Standardized Pro-

Despite significant environmental implications, S-LCA currently remains outside the mainstream, operating on different stages and lacking the established application of its counterpart, LCA. (Larsen et al., 2022)

This research aims to bridge this gap by investigating the interconnections between social and environmental sustainability within the building industry. Through user Integration in the design phase by letting them evaluate the design solutions.





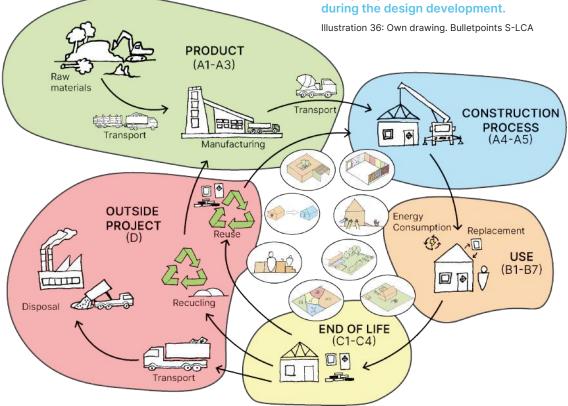


Illustration 35: Own illustration Combination of LCA and Social sustainabilty

Case study

Daycare Center Bison

Location: Gl. Rye, Skanderborg

Year: 2024

Area: 950 m2

Typology: Integrated daycare center

(Sweco Denmark)

The aim of the investigation of this integrated daycare center is to gain knowledge about how LCA affects the process and the final design together with still keeping in mind of the pedagogical philosophy and the users. To gain knowledge about how to use both quantitative and qualitative data in the process towards a final design.

Bison is an integrated daycare center with space for 130 children from nursery to school ready. The main design driver in the process has been environmental sustainability, materials and LCA together with the pedagogical philosophy. The focus from the beginning of the process was to go as low as possible in terms of Carbon emission. This included material choices where the users of the design needed to think about materials with low carbon emission on an equal basis as the building architecture. Material choices was therefore a significant part throughout the process with operation and maintenance expenses kept at a minimum. With the optimization of the carbon emission Sweco worked with the optimization of the area and especially the building envelope to try and minimize it. That resulted in a circular building shape that minimized the envelope and created a private outdoor space in the middle and a public Playground outside it. (Sweco Denmark)

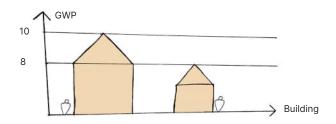
The main construction is a light circular wooden construction that helps to reduce the carbon footprint. Reused bricks from nearby buildings forms the circular wall and some of the group room walls

and reduces the carbon emission further. Besides that, further savings from the old daycare center was made to reduce the amount of new materials. This meant that they calculated the first LCA to 9,35 kg $\rm CO_2/m^2$ per year and the last calculation ended on 8,79 kg $\rm CO_2/m^2$ per year. Therefore, they ended way below the requirements of kg $\rm CO_2/m^2$ per year. (Sweco Denmark)

Researching this daycare center gives understanding on how to implement LCA into the process and how it affects the design. It also shows how LCA and Social sustainability could be combined in the process and what that looks like in reality, taking in consideration both the quantitative and qualitative data.

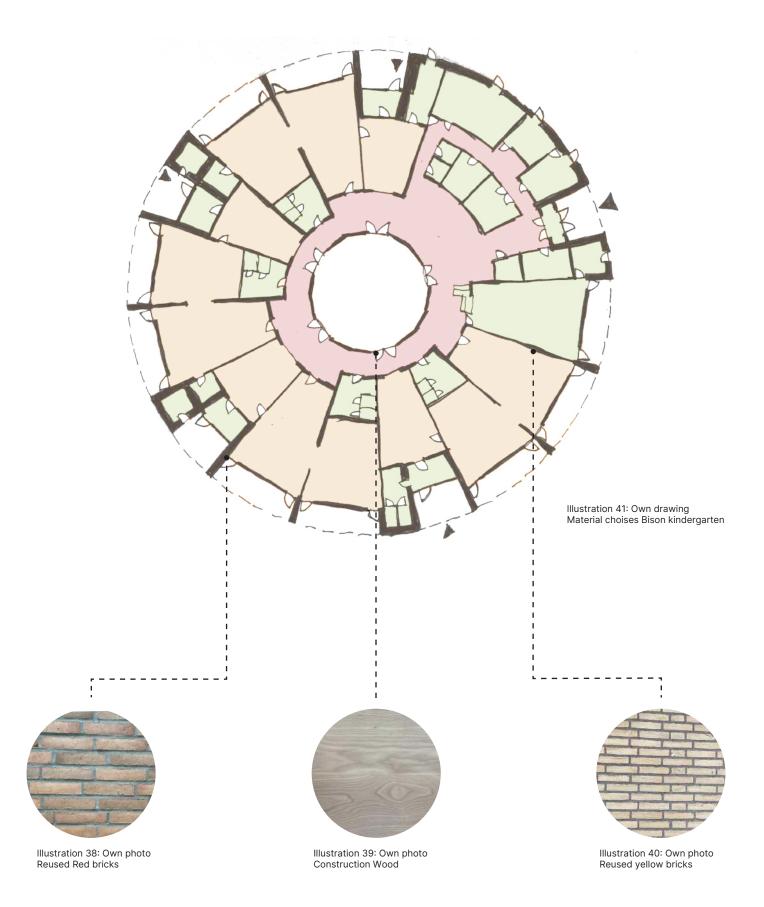


Minimize the building envelope



Stay under 10 (aiming towards 8) kg/CO2/m2/year.

Illustration 37: Own drawing. Bulletpoints Daycare center bison



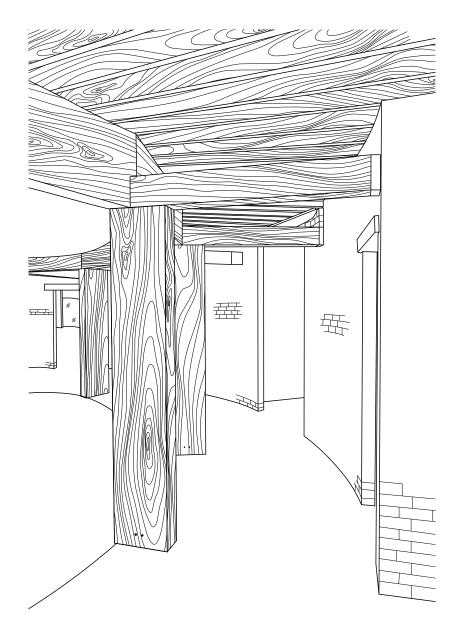


Illustration 42: Own drawing Construction and materials Inside

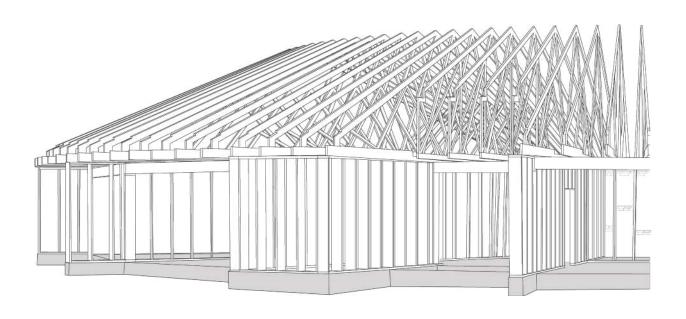


Illustration 43: Own drawing Structural system Bison

Design solution space **Environmental sustainability**



Plant fibers Tomato sticks Wood shavings Cork Biobased







GWP Span:

Straw

-7,39E+01 and -8,44E+01 kg CO2-eq / m3

Wood







GWP Span:

-8,28E+02 and 1,3E+02 kg CO2-eq / m³

(Ltd, Oriented strand board, EPD 2020) and (A/S, Glulam construction wood products of spruce, EPD 2022)

Troldtekt







GWP Span:

6,94E+00 and 1,08E+01 kg CO2-eg / m3

Steel roof sheets







GWP Span:

7,32E+02 and 1,30E+04 kg CO2-eq/m3

Sedum







GWP:

6,81E+00 kg CO2-eq / m3

Hemp







GWP Span:

3,79E+00 and 3,69E+01 kg CO2-eq / m^3

Brick







1,83E+01 kg CO2-eq / m3

Screw



GWP:

8,52E-01 kg CO2-eq / kg

Legislations

Cleaning:



The daycare institution must be cleaned regularly and thoroughly.



There must be a cleaning plan that describes how often and how the different areas of the institution should be cleaned.



The staff must be instructed in cleaning procedures.

Hand hygiene:



There must be sufficient access to handwashing facilities.



Children and staff must be instructed in hand hygiene.

Toilets:



Toilets must be clean and well-maintained.



Toilets must be designed so that children can use them independently.



There must be sufficient access to toilets.

Food preparation:



Food preparation must take place in a clean and hygienic kitchen.



Staff preparing food must be instructed in hygiene principles.



Food must be stored and prepared safely.

Illustration 45: Hygiene

Personal safety:



The daycare institution must have supervision that can ensure that children are supervised at all times.



There must be sufficient staff to handle an emergency.



The staff must be instructed in first aid and emergency management.



Children must be instructed in safe behavior in the institution.

Building security:



The building must be safe and healthy for children to stay in.



There must be no sharp corners or edges that children can injure themselves on.



Windows and doors must be secured so that children cannot fall out or injure themselves.



The playground must be safe and fenced in so that children cannot get out onto the road.

Illustration 46: Security

Building construction:



The building must be constructed of fire-resistant materials that can withstand fire for a specified period of time.



Load-bearing structures must be designed to carry the fire load for a specified period of time.



The building must have fire compartments that can prevent fire from spreading.

Fire alarm and warning:



The daycare institution must have an automatic fire alarm system (ABA system).



The ABA system must be connected to a 24/7 manned fire control center.



There must be a clear and effective warning of people in the building in the event of a fire.

Evacuation:



There must be sufficient and safe escape routes from all rooms in the building.



Escape routes must be easily accessible and free of obstacles.



There must be emergency lighting on escape routes.

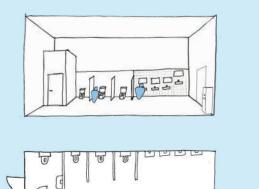


The staff must be instructed in the evacuation of children and staff.



Architectural translation

The hygiene legislation translated into architecture is creating spaces that is easy to clean and easy to access while cleaning. The materiality of the room also plays a role, these needs to be easy to clean. This means that the appearance of the materials needs to look clean and the tactility needs to be smooth with no spaces where dust and bacteria can hide.



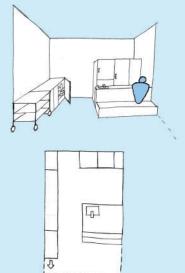


Illustration 48: Own drawings Architectural transition of hygiene

Security legislations translated into architecture is in multiple different levels. This contains the level of the children, the level of the employees and the visitors. In terms of the childrens safety the playground needs to be safe from possible dangers from outside the daycare center. And inside sharp edges is a possible danger for the children.





Illustration 49: Own drawings Architectural transition of security

Translating fire legsilations into architecture allows us to think about the planning of the building the materials that are used and the escape routes. Espacially the materials are important designing a daycare center, a material that has a high fire resistance may not work in terms of the standards set for the children.

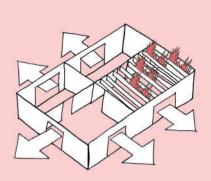
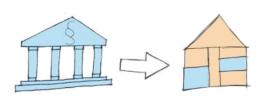


Illustration 51: Own Drawing Architectural transition of fire



Incorporate the different legislations conceptually into the building program

Illustration 50: Own drawing Legislation bulletpoint

ANALYSIS

Location

City context



1. Lillevang (1951)



2. Ønskeøen (2005)



3. Lillevang (1951)



4. Sommerfugl (1996)



5. Pilegården (1991)



6. Grønnebakken (2014)

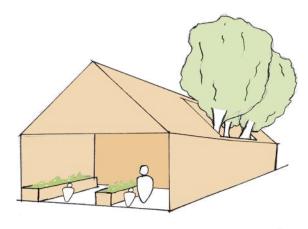


7. Møllen (1936)

Illustration 52: Own photos. Existing daycare centers in Næstved

Analysing the city context allows figuring out what could affect the location and also why the daycare center should be placed where it is. This is used to get a general view of the transport infrastructure and where existing daycare centers are located to get an understanding of the location's opportunities.

It is seen that the location of the daycare center is placed into the new district that is planned by the municipality of Næstved. The new district is located in the northern part of Næstved close to the railway and with good access arriving with car. Many of the existing daycare institutions are older buildings with no room for expansion. It means that with a new district being planned a new daycare institution is needed.



Design the daycare center as an example of the next generation of sustainable daycare centers.

Illustration 53: Own drawing. Bulletpoint City context

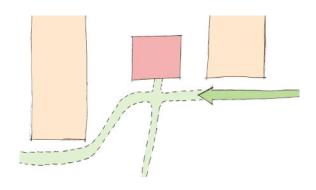




Local context

Analysing the local context gives information about the area near the site. Which buildings, paths, roads, railways that will have an effect on the site and design both positive and negative.

It is seen that the site is located in an future education area with both a school, gym and a community house facing towards it. Further towards north the railway is creating a natural boundary for the site although this also is a source for possible noise problems. On the other site of the road towards south it is seen that a new residential area is being build. This allows the families that are going to live there to be close to the daycare center and school and possibly more tempted to use their facilities.



Connect to and expand the paths and bike lanes surrounding the site

Illustration 55: Own drawing. Bulletpoint local context





Site pictures



Illustration 57: Own photo from site Direction Southeast towards road and path



Illustration 58: Own photo from site Direction Northwest from path



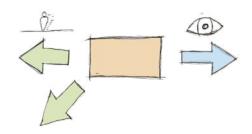
Illustration 59: Own photo from site Direction North from path



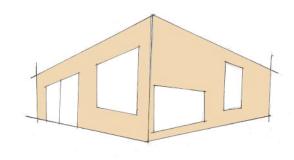
Site context

Analysing the site context gives the options to discover what connections and possible things the design can be connected to. This could be paths that run through the site or buildings that at some point interacts with the building site. These are all possible design challenges that at some point could be integrated or taken care of in the design solution.

The daycare center is close to a school, gym, and community hall which all are placed around a plaza that connects them. The plaza could be used as well as the other functions by the daycare center to help the kids making something different outside the daycare center. As well as being connected to the plaza a path is also connected to the site. This path leads to the existing path that can be used when the parents either comes picking the children up or delivering them in the morning without thinking about the danger of the cars.



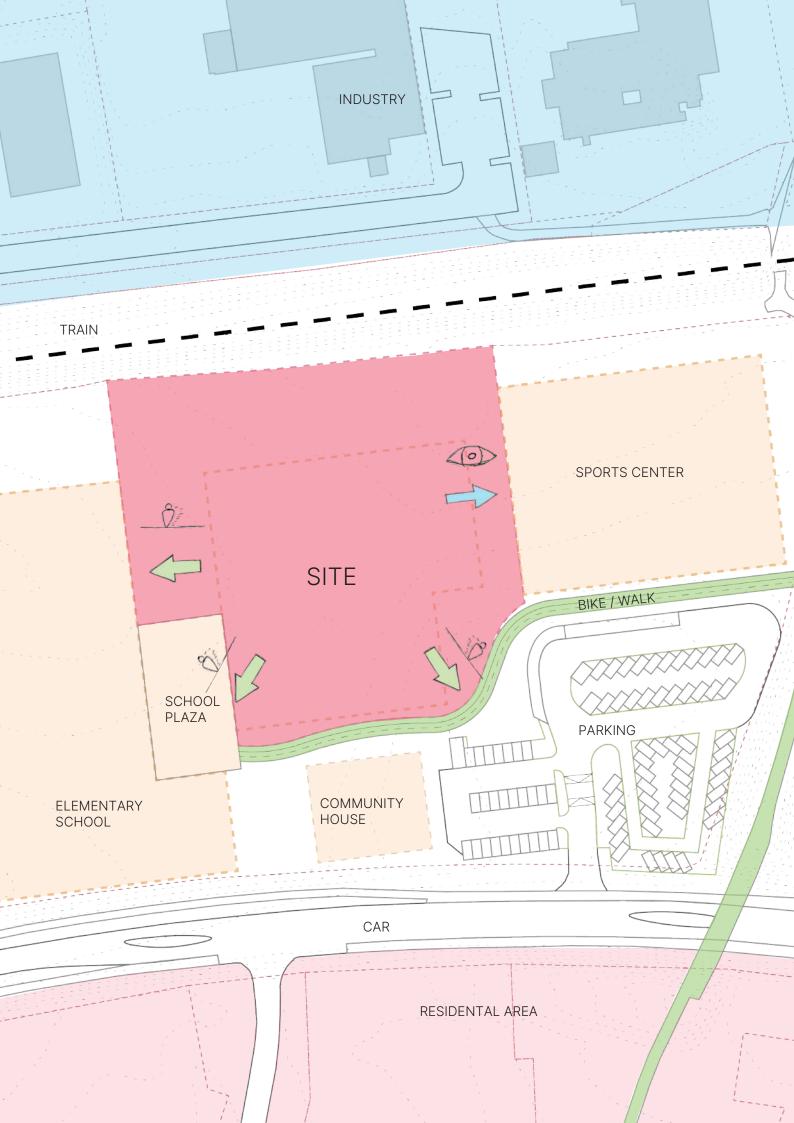
Make a connection to the school, sports center and the plaza to create areas outside the daycare center where the children can explore and learn.



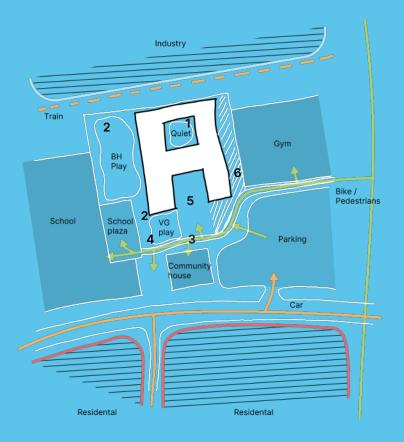
Make the building envelope open and inviting to the surroundings.

Illustration 60: Own drawing. Bulletpoints site context





Design solution space Context



Ideration 1

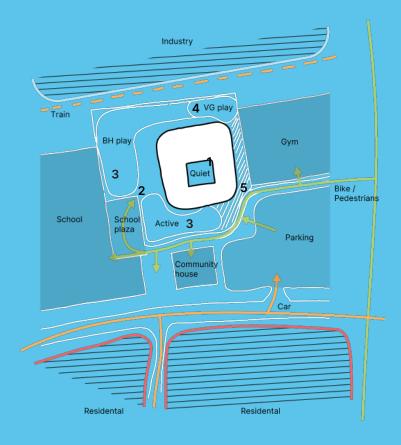
PROS

- Outdoor facilities for nursery and kindergarten are seperated
 Relation to community house

- Large outdoor entrance area

Ideration 2

PROS



Activity

Playgrund areas Common area

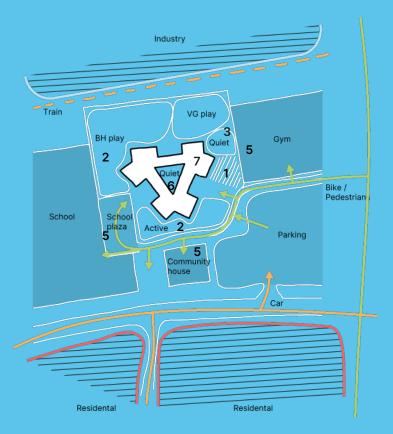
Calm

Flexible space Common area

Quiet

Out and indoor sleeping area





Ideration 2

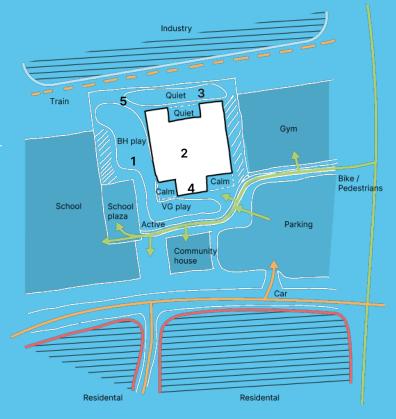
PROS

- Active outdoor space towards the active areas outside the site
 The quiet space is the most private space
 Two entrances (towards parking and school

CONS

Ideration 4

PROS



Microclimate

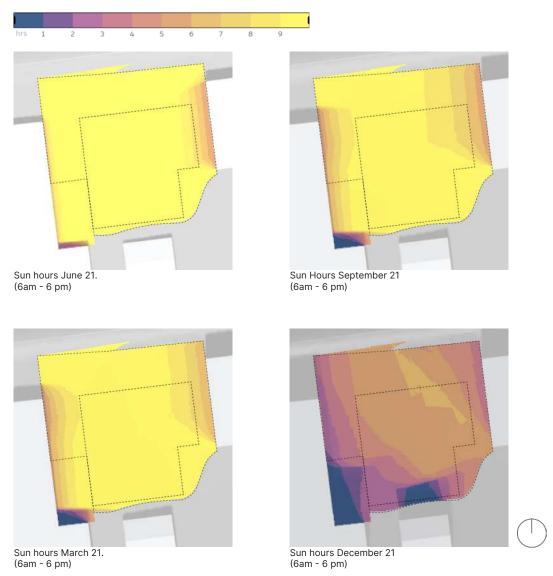
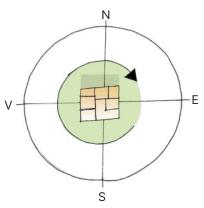


Illustration 63: Sun hours. Data extracted from simulations made with Forma

Sun

Analysing the sun on the site, gives an indication of where attractive outdoor spaces will be and also indicates where possible passive design strategies should be implemented. This is used to see where the optimal placement of the building is in order to obtain most solar hours.

Analyses of the sun hours from 6 am to 6 pm in March, June, September and December shows that there is plenty of sun hours on the site.

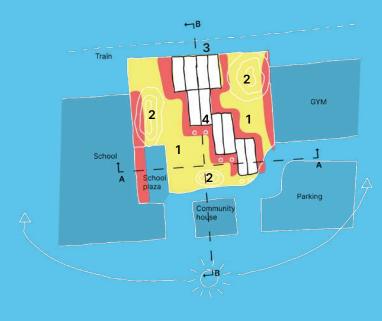


Optimizing the sun hours in- and outside the building through the placement.

Illustration 64: Own drawing. Bulletpoint sun

Illustration 65: Own drawing Design solutions space sun

Design solution space Sun



Ideration 1

Stock

PROS

- The building seperates the site and creates two outdoor spaces with different amount of sun hours
- Hills allows areas with less sun hours to gain more
- Part of the building is placed towards the railway and therefore casts shadows outside the cadastre

CONS

- The building is placed on the area with the must sun hours
- The building creates a smaller dark outdoor space towards the gym





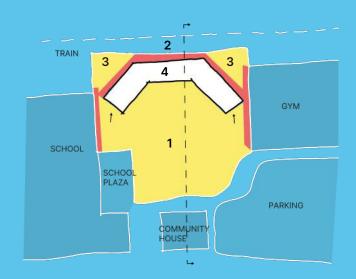
Ideration 2

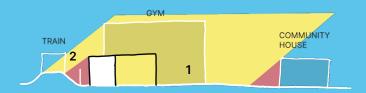
The Bow

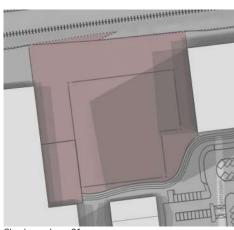
PROS

- Large area with a lot of sun hours towards social spaces (school plaza and path)
- 2. The building is placed towards the railway and therefore casts shadows outside the

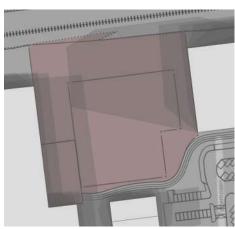
- Creates two inactive spaces towards the railway
- 4. The building does not create small shaded



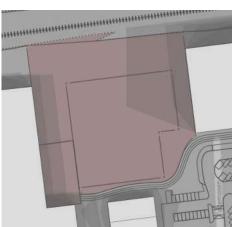




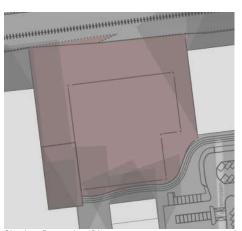
Shadows June 21. (6am - 6 pm)



Shadows September 21 (6am - 6 pm)



Shadows March 21. (6am - 6 pm)



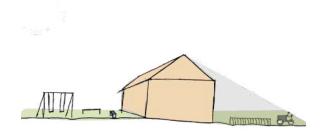
Shadow December 21 (6am - 6 pm)

Illustration 66:Shadows (6am - 6 pm). Data extracted from simulations made with Forma

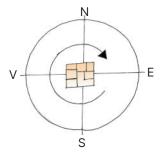
Shadow

Analysing shadows on the site is used to located possible areas with shadow. It could be from surrounding buildings or existing trees and bushes on the site. This shows where possible darker spaces are located which both could be positive and negative compared to what is creating it. It is used to locate possible shadow areas that could be utilized or possible areas that should be avoided creating.

Through the analysis of shadows from 6am to 6 pm in March, June, September and December it is seen that the gym creates shadows most of the year.



Utilize the spots that are lightest for stays.

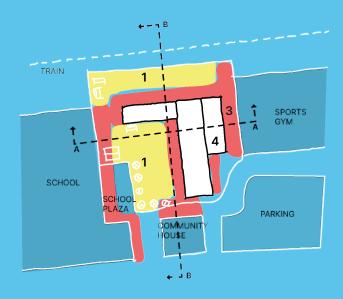


Optimize the natural daylight inside the building through placement and rotation.

Illustration 67: Own drawings. Bulletpoints shadow

Illustration 68: Own drawings Design solutions space shadow

Design solution space Shadow



Ideration 1

Centered angle

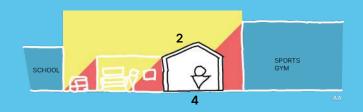
PROS

- Divided outdoor area with minimal shade towards West and Northwest
- Trees and building creates small partly shaded areas

CONS

- 3. Dark outdoor space between building and gym
- gym

 4. Placement of building is partly in shaded areas





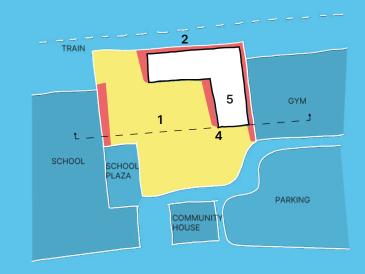
Ideration 2

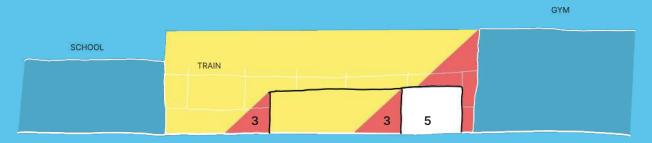
Cornered angle

PROS

- Building is placed in shaded areas that allows for more sun in outdoor spaces
 The building is placed towards the railway
- The building is placed towards the railway and therefore casts shadows outside the cadastre

- Few small partly shaded areas
- Large contrast between shaded and sunny
- 5. Minimal sun inside the building





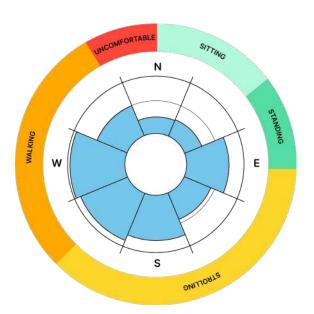


Illustration 69: Wind rose and comfort wheel Data extracted from Simulations made with Forma

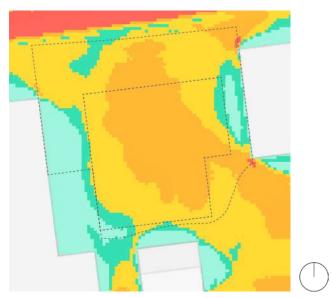
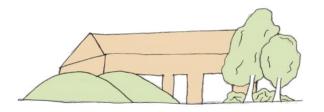


Illustration 70: Mapping of comfort level Data extracted from Simulations made with Forma

Wind

Analysing the wind conditions on the site gives an indication of the wind direction and where to possible screen the wind to create outdoor areas that is usable. This is used to collect data that shows where possible wind conditions get to aggressive and therefore needs screening.

The wind conditions on the site are not uncomfortable, but they are still not that comfortable that it is nice to sit down. It is seen that the main direction of wind is from West and South, therefore design solutions that breaks the wind from that side would be a solution.



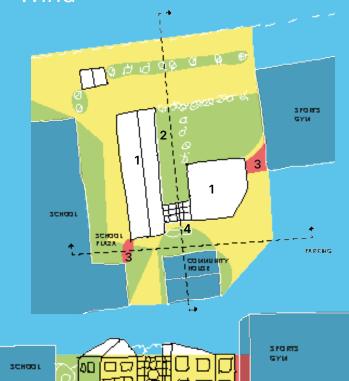
Implement design solutions that breaks the wind to create spaces for different activities throughout the year. (building, terrain, vegetation)

Illustration 71: Own drawing. Bulletpoint wind

Illustration 72: Own drawing Design solutions space wind

Design solution space

Wind



Ideration 1

Stock and Point

PROS

- The building is placed in the less comfortable area
- The building shelters the wind and creates a comfortable outdoor space on the Eastside

CONS

- The building is placed close to the surrounding buildings which can lead to uncomfortable wind conditions
- The entrance is placed in a potential uncomfortable outdoor area

Ideration 2

TRAIN

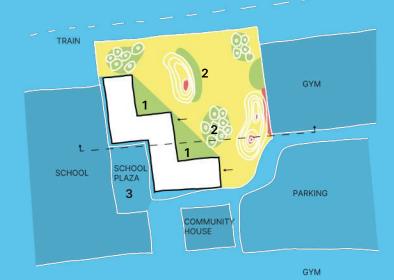
Zig zag

PROS

- The building shape creates smaller outdoor areas with shelter
- 2. The trees and the hills helps breaking the
- The building and the school shelters the school plaza from the wind

CONS

 The building is placed close to the school which can lead to uncomfortable wind conditions





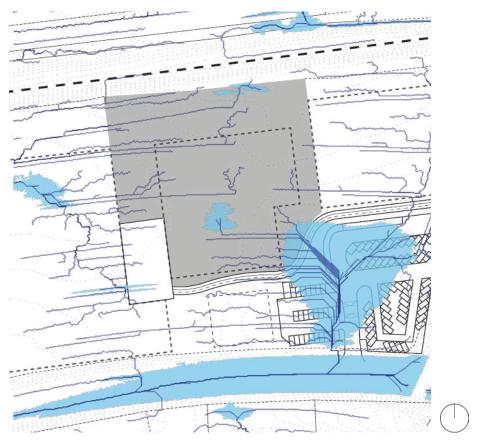
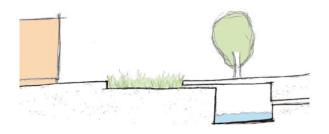


Illustration 73: Bluespot. Data extracted from simulations made with Forma

Water

Analysing the groundwater on the site tells if there are problems with water on site. This means that it tells if there are future problems with flooding in the area. If there are issues with water on site possible solutions should be integrated in the design to prevent future flooding. If there are no problems design solutions is not needed. It is used to see if future problems with high groundwater is an issue, and possible design solutions should be included.

Groundwater is not an issue on the site, the small amount that is visible in the middle of the building plot will disappear as the design is placed there. But as seen in the tender material groundwater is to be handled inside the building site. Therefore, all the channels of water is to be kept inside the cadastre.



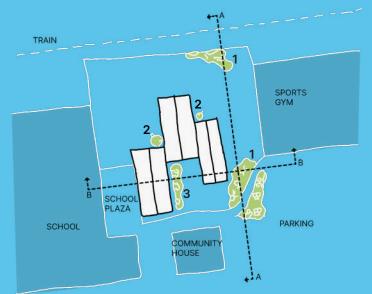
Use sustainable rainwater solutions to prevent rainwater from gathering unwanted places.

Illustration 74: Own drawing. Bulletpoint water

Illustration 75: Own drawings Design solutions space wate

Design solution space

Water



Ideration 1

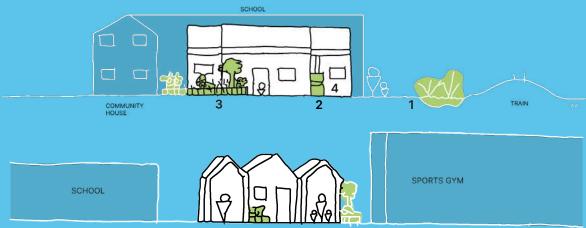
Stock

MEASURES

- 1 Rainwater lake
- 2. Barrels that collects rain from the room
- 3. Rain gardens

POTENTIALS

Collected water can be used for watering the plants and water play for the children



Ideration 2

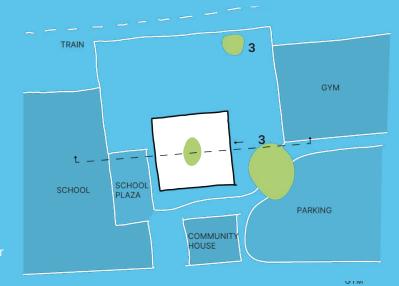
Block

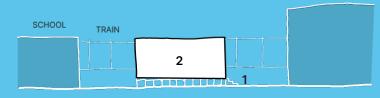
MEASURES

Raise the building from the water

POTENTIALS

- 2. Low carbon emission
- implementing water solutions in the outdoo area





Users

In the upcoming section, we will delve into the various users involved in the daycare center project. The daycare center caters to a diverse group of users, including children, pedagogues, parents, and experts in child development. This thesis primarily focuses on the needs of the children and pedagogues. The children are further divided into subgroups based on age. It is essential to consider the unique needs of each age group to fully comprehend their developmental requirements.

Due to the extensive number of users involved, this thesis excludes parents and other external users whose involvement in the daycare center is limited. While it would be interesting to examine their needs, the scope of this thesis does not allow for it sufficiently.

To better understand the users, this section presents personas and a scenario. These provide insights into the people involved and visualize the challenges that arise during a typical day in the daycare center. To create accurate storyboards, the research includes interviews with pedagogical leaders from two kindergartens and an integrated daycare center in the Aalborg region.

Pedagogue

Name: Pernille
Age: 45 years old
Residence: Næstved
Interests: Needlework

Family status: Lives with her husband and

3 children

Needs:

- Abundant storage space to tidy away toys and practical items
- Clear and organized spaces that can be divided into smaller areas for different types of play

Who is Pernille?

Pernille is a 45-year-old pedagogue who lives in Næstved with her husband and three schoolaged children. When she is not working at the daycare centre, she spends her time pursuing her passion for needlework. She is a caring and dedicated pedagogue who is passionate about providing children with the best possible opportunities for learning and development. She is creative in her approach to pedagogy and often uses needlework and creative activities in her teaching.

- Furniture that enables interactions with children at their eye level
- Practical furniture that can be adjusted to provide good working positions
- Clear zoning of functions
- Art room for children

Children

Toddler

Name: Karl

Age: 2 years old Residence: Næstved Interests: Dinosaurs

Family status: Lives with his parents and

dog

Needs:

- Outdoor and indoor sleeping area
- · Space for retreat
- Stools that allow children to reach eye level with the adults

Who is Karl?

Karl is a happy and curious 2-year-old boy. He lives in Næstved, Denmark with his parents and his dog, Klara. Karl's big passion is dinosaurs, and he can spend hours playing with his dinosaur toys and reading books about them. Karl is an active boy who loves to run and play outdoors. He is also a social boy who loves to play with other children. Karl is a good communicator and can say many words and phrases.

- Specific play areas for each type of play
- · Many shapes and colors

Kindergarten child

Name: Sofie

Age: 3,5 years old Residence: Næstved

Interests: Princesses, especially Anna

from the Frozen movies

Family status: Lives with her parents and

two older siblings

Who is Sofie?

Sofie is a happy and energetic 3.5-year-old girl. She lives in Næstved with her family and loves to play, use her imagination, and be creative. Sofie dreams of becoming a princess and living a happy life. She is a good little sister and is always happy to help her older siblings, whom she looks up to very much. Sofie can be a bit shy in new situations, but once she feels comfortable, her potential shines through.

Needs:

- Pretend play environments
- Sandbox with sand toys

- Nap room
- Security through familiar rooms and staff

Preschooler

Name: Casper Age: 5 years old

Residence: Næstved

Family status: Lives with his parents and

Interests: Cars and monster trucks

younger sister

Who is Casper?

Casper is an energetic 5-year-old boy who lives in Næstved with his parents and younger sister. He is passionate about cars and monster trucks, spending hours playing with his toy cars and watching monster truck shows on TV. Casper is a happy and social boy who loves playing with his friends in the neighborhood. He is also a good big brother and is always happy to babysit his little sister when needed. Casper is a curious boy who loves learning new things.

Needs:

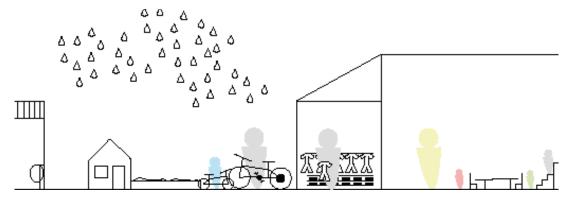
- Abundant storage space to tidy away Playground equipment
- Pillow room/ Activity room

- Daily Structure like in schools
- Supportive atmosphere

Scenario

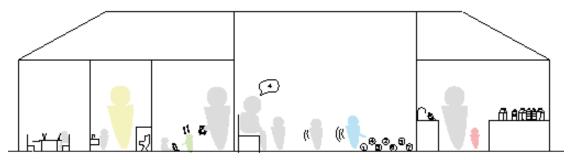
A day with Karl, Sofie and Casper in the daycare center

1. MORNINGS AND ARRIVAL



Pernille is the opening pedagogue of the daycare center today and she gathers all the children in the common area. Karl is one of the first children to arrive, but he does not know Pernille, so he begins to cry. Casper and his dad arrive on their bikes, they park them against the entrance wall because the **bike shed is too far away**. Sofie arrives late and her mom **can't find a free hanger** for her jacket in the 'grov garderobe'.

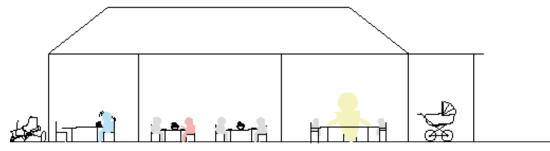
2. ACTIVITY



Pernille is painting with the nursery children inside their group room, there is **no sink in the room** so they must go to the toilet to wash their hands when they er done. Karl is in the other nursery group, and they are playing with animal toys. He has seen a dinosaur he wants to play with. Another child takes it before him, so he gets upset. Sofie must make dolls from waste. It must be washed before they can begin, but the **sink is too high** for Sofie to reach.

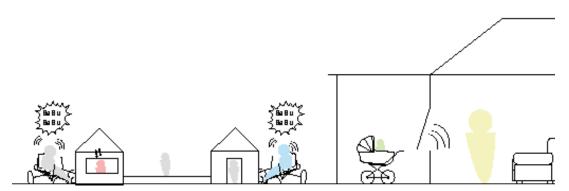
'Store børns gruppen' was playing with numbers. Casper is too excited to let the other children get their turn.

3. LUNCH



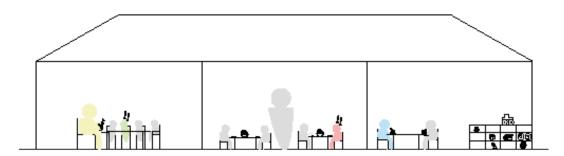
Pernille has difficulties helping all the children around the table because it is **too wide**, so she must get up several times to help those furthest away. Karl is still upset and doesn't want to eat so he is put to sleep instead. Sofie has become hungry and rushes to the table but **can't reach the food**. Casper can't sit still because he wants to go outside and play with the mooncars, he can see through the window.

4. OUTDOOR PLAY



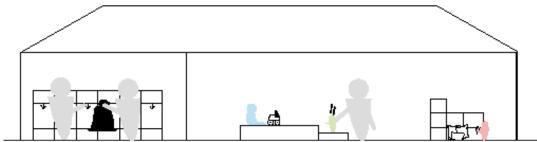
Pernille is on her break while the children are outside. The window is open, and the **children's noise is disturbing her break**. The noise also wakes Karl. Sofie tries to play in the playhouse, but Casper and some other boys are driving around playing police and making noises like sirens, so she can't concentrate.

5. AFTERNOON SNACK



Pernille tries to keep the nursery children's attention while they eat, by telling a story using the food as props. Karl is impatient because the pedagogue is too slow to feed him. Sofie doesn't understand why she must share the food with the others and gets upset when they take food form Infront of her. Casper has seen a monster truck that he wants to play with, so he rushes to eat up.

6. FREEPLAY AND PICK UP

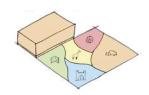


As the first children are picked up, the groups are joined and Pernille gets off. The room is large but does not have enough play areas for all the children, some of the children er therefore playing in the wardrobe. Karl wants to play with Casper, but he isn't interested. Sofie is trying to find a quiet place to draw. Caspers dad is there to pick him up and gets his wet cloth in a plastic bag to take home to dry.

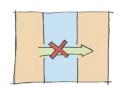
The following bullet points are key challenges identified by both users and the academic literature pertain to acoustics and space design. Pedagogues emphasized the importance of group room flexibility. However, the ability to divide rooms was insufficient if partitions lacked sound-proofing. Flexibility also extended to the design of individual rooms and play areas. The pedagogues desired a balance between controlled play areas and open-ended spaces that facilitate free play

and encourage children's creativity. Additionally, the pedagogues highlighted the need for flexible storage solutions that cater to both children and pedagogues. This includes accessible storage for children's toys and learning materials, allowing for easy retrieval and organization. Pedagogues also require adaptable storage solutions to accommodate a variety of teaching materials and resources, ensuring efficient use of group rooms and common rooms.

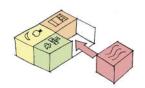
Divide the playground into different areas with different play environments



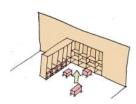
No pass-through rooms (except hallways)



Incorporate room for drying wet cloth



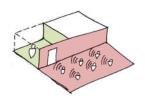
integrate storage for toys, that should make it possible to hide them quickly



Integrate rooms for high activity levels



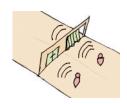
The pedagogues must have a quite break room, away from the children.



Integrate niches into the common areas



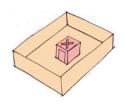
Flexible rooms with soundproofs diversions



There must be inventory as sinks and toilets in children scale



Avoid satellite rooms



Integrate pretend play environments both inside and outside

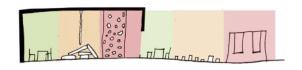
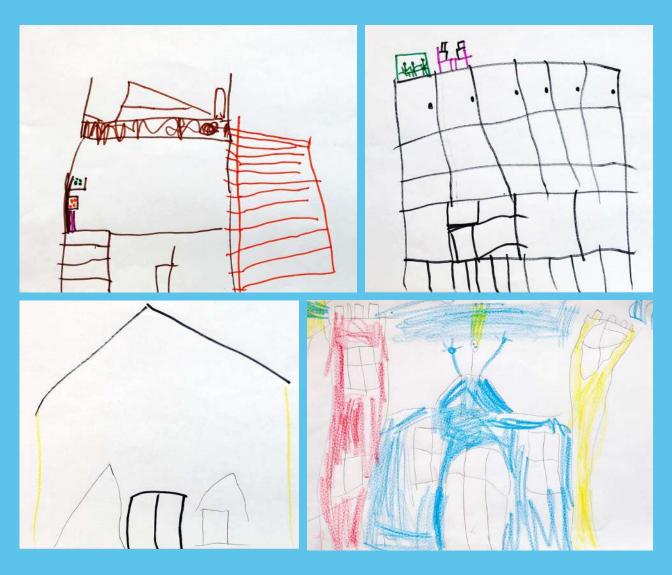


Illustration 77: Own illustration Bulletpoints

Design solution space User

During a workshop with daycare centers in Aalborg, children were tasked with drawing their ideal kindergarten. Their drawings primarily depicted elements familiar to them, such as furniture from their daycare or bedrooms. Some children focused on specific furnishings, while others drew a building. This workshop revealed that for children, recognizability, vibrant colors, and opportunities for imaginative play hold greater importance than specific rooms or designated functions. The focus is on the types of play facilitated by the space, rather than the space itself.



Room program

Functional diagram

Design criteria
A summary of the knowledges gained through the studies and analysis

DESIGN BASIS



Room program

Room

Tender material

Group rooms

Decentralized entraces and ('Grovgarderobe')

Common area and ('Fin garderober')

Basic group room kindergarten ('Twin group')

Basic group room nursery ('Twin group')

Children toilet

Outdoor toilet

Common areas Sleeping room ('Liggehal')

Common area

Porch

Play room ('Motorikrum')

Depot for play room

Handicap toilet

Near depot ('Nærdepot')

Production kitchen Room for delivery of goods

Kitchen depot Cleaning room

Wash room

Wardrobe for the pedagouges Toilet for the pedagouges

Employee room

Main office (Leader)

Office

Administration

Meeting room ('Samtalerum')

Depot together with employee facilitites

Print/copy room

Total area

Coverings for group rooms and rest area.

Depot mooncars + toys

Depot technical

Fire hut with chimney

Guest parking for strollers/prams (covered)

Garbage shed/yard

tender material from the competition. Rooms, square meters, people load, and room amounts are taken directly from (RUM, 6. Rumskemaer, Stenlængegård Daginstitution 2023) and (RUM, 4. Funktionsprogram, Stenlængegård Daginstitution 2023). Atmosphere, Flexible rooms, spatiality and privacy are added to specify it for the design in figuring out what different specialties the room has. These are valuated with inspiration and knowledge gain from previous studies. The rooms are divided according to which area they belong to, group rooms, common rooms and administration.

The room program is inspired by the one in the

ATMOSPHERE

Formal

A feeling of inclusiveness and welcoming. The transition space from public to the daycare center.

Active

A feeling of entering a space that allows for high activity without worrying about breaking anything.

Functional

A room with a specific function that is being reflected in the way it is designed. The functions reflect what the space is used for.

Homelike

The feeling of belonging and being safe. A space with familiar references that creates safety.

Clean

The feeling of entering a clean and bright space that reflects a certain function.

FLEXIBLE ROOMS

Whether the individual room can be used for several different things at the same time or has only one function.

SPATIALITY

Room heights in relation to activity level

PRIVACY

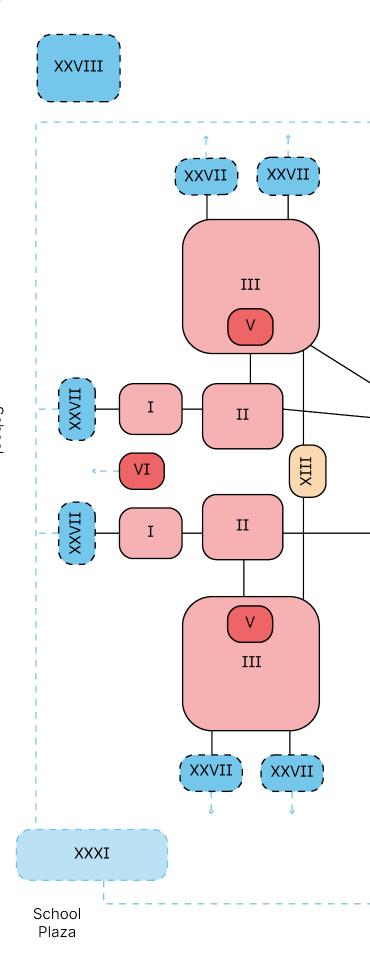
Are the rooms shared with others, or is it only a single group room/staff group that has access to it.

m^2	People load	Amount	Atmosphere	Flexible rooms	Spatiality	Privacy
Tender material	Tender material	Tender material		From left to right Non-flexible Flexible Very flexible	From left to right Low ceiling Medium height celining High ceiling	From left to right Private Semi-Shared Shared
16	4-20	3	Formal			O—O
24	4-20	3	Formal	0-0-0	\bigcirc	0-0-0
100	52	2	Homelike	O-O-O	\bigcirc	O —O—O
84	30	1	Homelike	O-O-O	\bigcirc	O
16	8	3	Clean	0	$\bigcirc\bigcirc -\bigcirc$	0-0-0
6	3	1	Clean	_	$ \bigcirc \hspace{-1em} - \hspace{-1em} - \hspace{-1em} \bigcirc \hspace{-1em} - \hspace{-1em} - \hspace{-1em} \bigcirc \hspace{-1em} - \hspace$	0-0-0
60	28	1	Functional	0	$\bigcirc\bigcirc -\bigcirc$	0—0—0
7	2	1	Formal	<u> </u>	$\bigcirc\bigcirc -\bigcirc$	0-0-0
60	50	1	Active	O-O-O	O-O-O	0-0-
40	26	1	Active	0-0-0	\bigcirc	0-0-0
14	2	1	Functional	<u> </u>	\bigcirc	0-0-0
6	2	1	Clean	OOO	\bigcirc	0-0-0
7	1	2	Functional	0	O-O-O	0-0-0
46-48	3	1	Functional	0	\bigcirc	0-0-0
4-5	1	1	Functional	<u> </u>	\bigcirc	000
5-8	1	1	Functional	<u> </u>	$\bigcirc\bigcirc$	0-0-0
8	1	1	Functional	$\bigcirc\bigcirc$	$\bigcirc\bigcirc$	0—0—0
8	1	1	Functional	0	0	0-0-0
12	8	1	Formal	0	$\bigcirc\bigcirc$	00-
8	3	1	Clean	0	\bigcirc	00-
30	20	1	Homelike	0-0-0	\bigcirc	0
13	1-4	1	Functional	0-0-0	\bigcirc	000
13	1-4	1	Functional	0-0-0	\bigcirc	000
8	6	2	Formal	0	\bigcirc	0-0-0
7	1	1	Functional	0	$\bigcirc\bigcirc -\bigcirc$	0-0-0
6	2-3	1	Functional	$\bigcirc\bigcirc -\bigcirc$	$\bigcirc\bigcirc -\bigcirc$	0-0-0
1220						
20	-	7	Homelike	\bigcirc	$\bigcirc\bigcirc$	0
25	-	2	Functional	$\bigcirc\bigcirc$	<u> </u>	0—0—0
25	-	1	Functional	$\bigcirc\bigcirc$	$\bigcirc\bigcirc$	<u> </u>
40	-	1	Active/Homelike	\bigcirc	$\bigcirc\bigcirc$	0-0-
10	-	1	Functional		$\bigcirc\bigcirc$	0-0-
30	-	1	Functional	$\bigcirc\bigcirc -\bigcirc$	$\bigcirc\bigcirc$	0-0-0

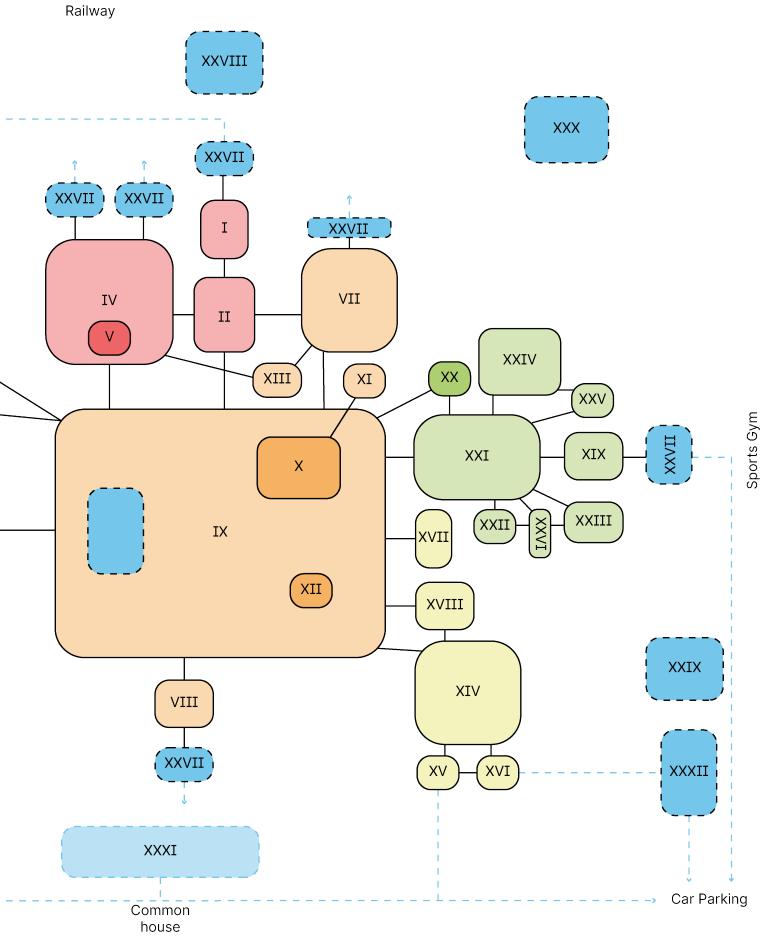
Functional diagram

I. Decentralized entraces and grovgarderobe II. Common area and fin garderober III. Basic group room kindergarten IV. Basic group room nursery ٧. Children toilet VI. Outdoor toilet VII. Sleeping room (liggehal) VIII. Porch (vindfang) IX. Common area X. Play room (motorikrum) XI. Depot for play room XTT. Handicap toilet XIII. Near depot (nærdepot) XIV. Production kitchen XV. Room for delivery of goods XVI. Kitchen depot XVII. Cleaning room Wash room XVIII. XIX. Wardrobe for the pedagouges XX. Toilet for the pedagouges Employee room XXI. XXII. Main office (Leader) XXIII. Office XXIV. Meeting room (samtalerum) XXV. Depot together with employee facilitites XXVI. Print/copy room XXVII. Covering for group rooms and rest area XXVIII. Depot mooncars and toys XIXX. Depot technical XXX. Fire hut with chimney XXXI. Guest parking for strollers or prams (covered)

Garbage shed or yard

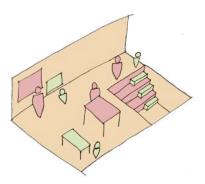


XXXII.

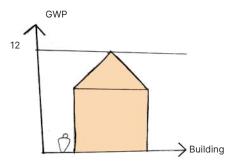


Design criterias

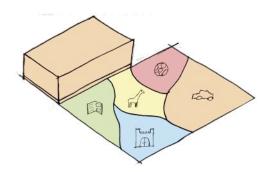
1st priority



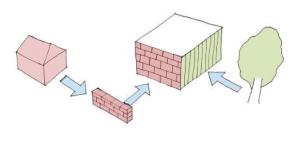
Design the interior within the children scale to encourage the self-reliance of the children



Keep the GWP under 12 kg CO₂/m² per year



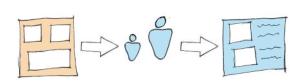
Divide the playground into different areas with different play environments



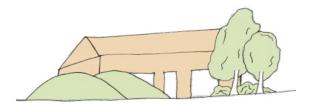
Base the design on use of biobased, reused or upcycled materials.

During the initial investigation of theoretical frameworks, the project site, and potential user needs, key findings were identified. These findings will be categorized into three tiers based on their perceived importance for addressing the project's problem statement. **3rd** priority encompasses elements deemed less critical and potentially reflecting desires rather than essential functionali-

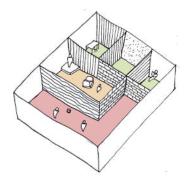
ties. 2nd priority comprises elements considered relevant for project quality but not deemed indispensable for successful problem-solving. The 1st priority is the highest and represents elements considered crucial for the project to effectively address the problem statement and maintain its feasibility. Design concepts generated during the development phase will be evaluated against the criteria established in 1st priority.



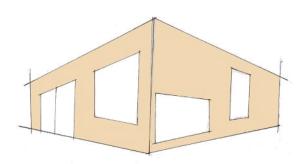
Involve the user in the design process, through feedback.



Implement design solutions that breaks the wind to create spaces for different activities throughout the year. (building, terrain, vegetation)



Create spaces with active and relaxed environments through room sizes and materials.



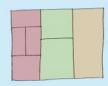
Make the building envelope open and inviting to the surroundings.

2nd priority

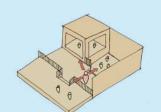
Incorporate the different legislations conceptually into the building program



Defined zoning between private, shared and public



The rooms shall be programmed to allow indirect supervision of the children



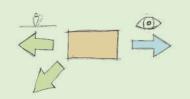
User perspectives should be involved in all stages during the design development.



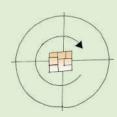
Minimize the building envelope



Make a connection to the school, sports center and the plaza to create areas outside the daycare center where the children can explore and learn.

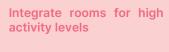


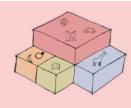
Optimize the natural daylight inside the building through placement and rotation.



Incorporate room for drying wet cloth







The pedagogues must have a quite break room, away from the children.



Flexible rooms with soundproofs diversions



There must be inventory as sinks and toilets in children scale



3rd priority

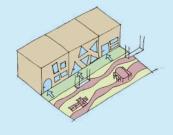
Creating spaces that offer different levels of activities and privacy to allow the children to meet without interrupting others.



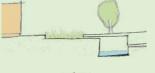
Stay under 10 (aiming towards 8) kg CO₂/m² per year



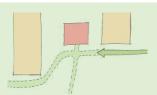
Design the daycare center as a small Children city



Use sustainable rainwater solutions to prevent rainwater from gathering unwanted places.



Connect to and expand the paths and bike lanes surrounding the site



Optimizing the sun hours in- and outside the building through the placement.



Design the daycare center as an example of the next generation of sustainable daycare centers.



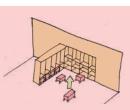
Utilize the spots that are lightest for stays.



Integrate niches into the common areas



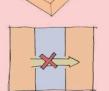
integrate storage for toys, that should make it possible to hide them quickly



Avoid satellite rooms





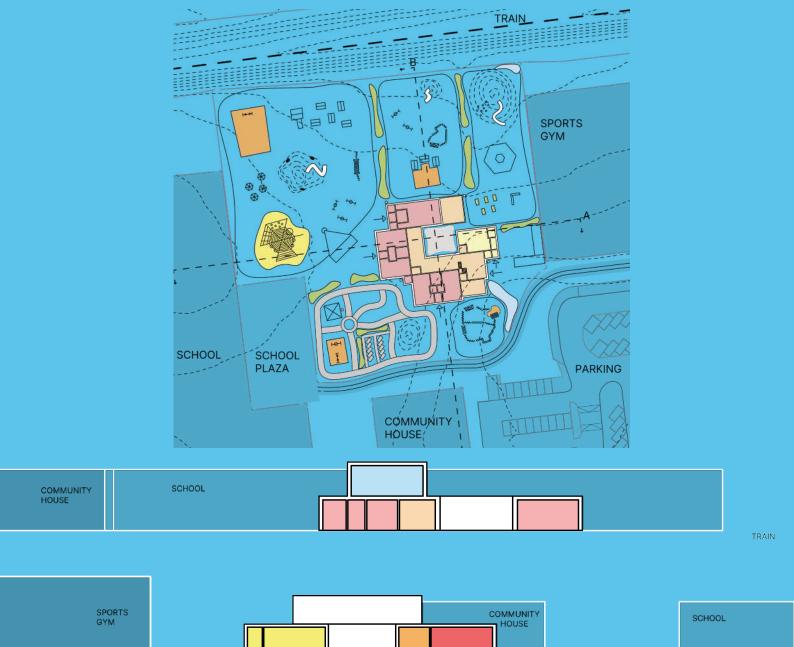


Integrate pretend play environments both inside and outside



Design solution space Summary of step 1

These two design solutions are summaries of all the earlier design solutions space drawings and will be used as the basis for further developments of the design.



Ideration 1

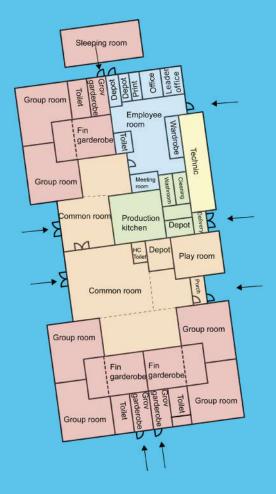
Courtyard

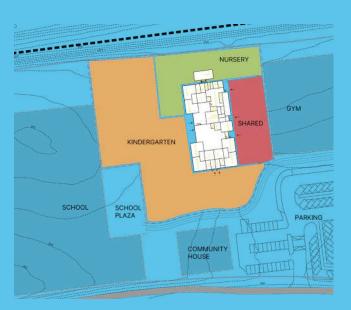
PROS

- Greenery helps dividing the playground into smaller areas
- the most active playground areas are facing the school and school plaza
- The courtyard gives the daycare center a quiet outdoor area sheltered from the

CONS

- The administration does not have a separate entrance
- The building does not clearly show the entrances
- The nursery basic group does not have a direct connection to the common area.







Ideration 2

PROS

- The Utilizing the darker spaces for transit

- The building is divided into functions and different levels from private to public Transition from private to public inside the building

- The building does not create or divide the outdoor area into different zones
- Not inviting from the parking and path

Functionality

An investigation of the functionality of the materials and room programming seen from both a qualitative and qualitative perspective.

Spatiality

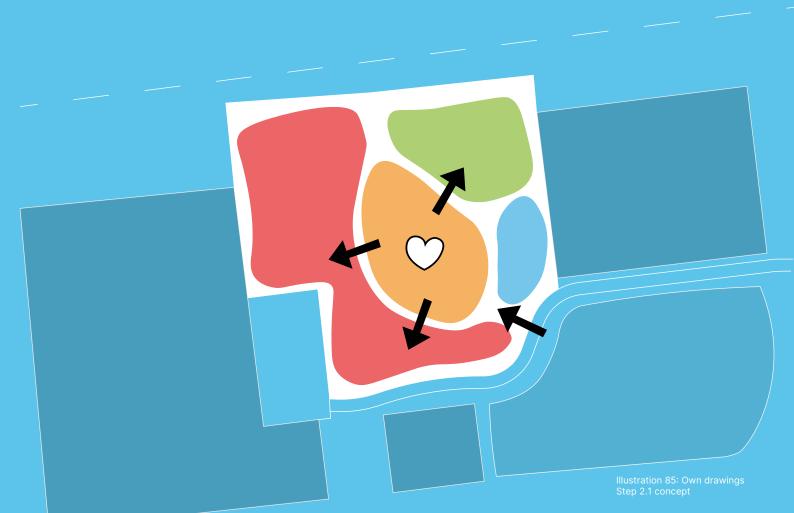
and there by their functions.

IDEA DEVELOPMENT

STEP 2.1

Shaping the idea

The following stage of the project will focus on translating the conceptual design into a more detailed and functional building solution. This phase will delve into the construction methods, circulation patterns, and program allocation within the daycare. Additionally, a workshop with a group of pedagogues and children from Karolinelunden kindergarter was conducted to gather qualitative data regarding the aspirations of both children and staff for an ideal daycare environment. This valuable user input will inform the design development process.



Construction principals and materials

Foundation

The thesis vision of employing exclusively bio-based or recycled materials restricts the material selection. To explore the relationship between specialized construction methods and environmental sustainability, this investigation examines different roof, wall and foundation designs utilizing various materials.

The foundation investigation compared traditional slab-on-grade and perimeter foundations to screw pile foundations. Due to the uneven topography, raising the screw pile foundation is necessary. To ensure accessibility, either ramps or ground levelling will be implemented. Slab-on-grade and perimeter foundations rely on concrete, which contradicts the project's vision of achieving 100% material reusability. Therefore, screw pile foundations were selected. Ramps are viewed as a positive feature, not a constraint. They not only pro-

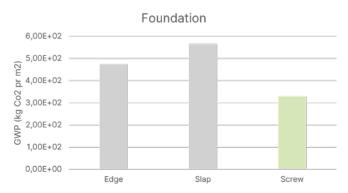


Illustration 86: Own diagram Diagram Based on data from EPD's

vide accessibility for the elevated foundation but also function as a transitional zone, integrating the building with the surrounding urban environment and fostering a natural flow from the exterior to the interior.

Wall

Wall analysis mirrored roof investigation, comparing traditional wood framing, hemp blocks, and modular straw systems. Balancing flexibility, material use, and environmental impact remained key. Unlike the roof (child-scale focus), wall priority shifted to embodied carbon (GWP) and adaptability. Traditional wooden post-and-beam system emerged as the winner, but modular systems offered insulation lacking in post-and-beam, while sacrificing flexibility (specific section removal vs. pre-defined modules).

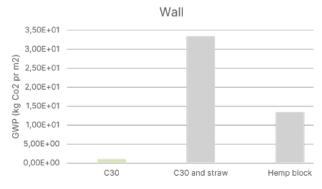
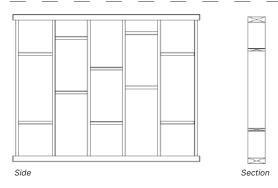


Illustration 87: Own diagram Diagram Based on data from EPD's



Wooden Structure (Munch-Andersen, TRÆ 56: Træskelethuse 2008)

PROS

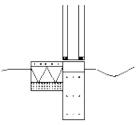
 high flexibility in relation to openings in the facade

CONS

- Risk of cold bridges



W= 300 x H= 95 mm W= 300 x H= 45 mm



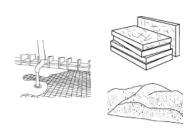
Edge footing

PROS

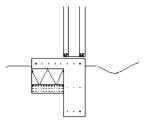
level free entrances

CONS

Can not be reused



Concrete Steel reinforcement Leca block Insulation (Hempcreed) Reused brikc gravel



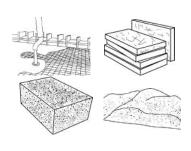
Slab foundation

PROS

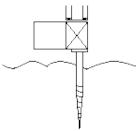
level free entrances

CONS

Uses large amounts of concrete



Concrete $0.56 \, m^3$ Steel reinforcement 0.092 m³ Insulation (Hempcreed) $0.3 \, \text{m}^3$ Reused brikc gravel 0.15 m^{3}



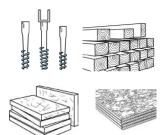
Screw

PROS

Can be reused

CONS

Bad Accessibility



OSB $0.56 \, m^3$ C30 $0.2 \, m^3$ Insulation (Hemp soft) $0.5 \, m^3$ 25 m^3



Side

Section

Module System (Echo)

PROS

Minimized the cold bridges

Low flexibility in relation to openings in the facade

0.46 m³

0.08 m³

 $0.3 \, \text{m}^{3}$

 0.15 m^{3}

0.092 m³



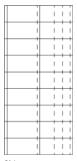
C30



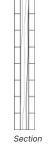
Straw



C30 W= 95 x H= 95 mm W= 95 x H= 45 mm C30 W= 400× 2500 mm Straw



Side



Тор

Hemp wall (Natural building, 2023)

PROS

Thermal mass

CONS

Relative heavy wall construction





W= 150 x H= 2500 mm W=360 x H= 300 mm Hemp

Roof

The thesis vision of employing exclusively bio-based or recycled materials restricts the material selection. Additionally, the concept of building on a child-friendly scale informs the choice of roof structures under consideration. Timber, Glulam (Glued Laminated Timber), and reused steel are chosen as the primary materials. The investigation focuses on flat roofs, one sided roofs, and truss roofs. The objective is to identify a solution that balances the building volume and height in relation to the future school and gym, while maintaining a

child-appropriate scale. Furthermore, the investigation aims to determine the optimal combination of construction techniques and materials to minimize material consumption and maximize the flexibility for future modifications.

Investigations has shown that the flat roof and the truss roof in GL30c are the ones in favour in achiving both a flexible structural system and hierarchy in the spatial experience. Furthermore the material chosen is the one with the lowest GWP.

Reused IPE 400



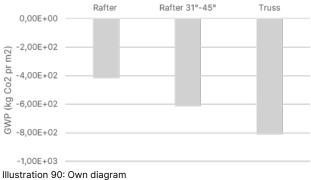
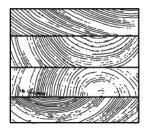


Illustration 90: Own diagram
Diagram Based on data from EPD's

GL30C



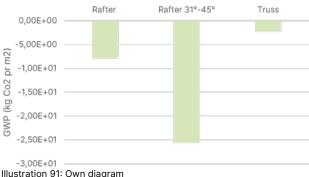
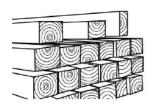


Illustration 91: Own diagram
Diagram Based on data from EPD's

C30



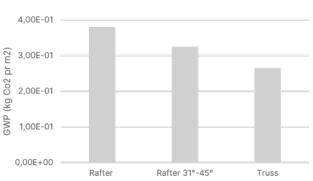
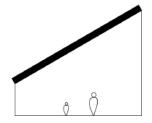
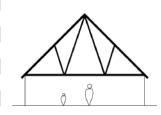


Illustration 92: Own diagram Diagram Based on data from EPD's







Flat roof

PROS

- Blending with the context buildings

CONS

- No hierarchy in room heights

One sided roof

PROS

Clear direction and hierarchy

CONS

- One facade will become verry large

Truss

PROS

Large space for ventilation

CONS

- No hierarchy in room heights

Rafter (Span 10 m)

Depth= 450 mm

Distance between beams = 2.4 m (lano & Allen, 2022)

Rafter 31-45 ° (Span 10m)

Depth= 450 mm

Distance between beams = 2.4 m (lano & Allen, 2022)

Truss (Span 10 m)

Height of truss system = 2400 mm

Distance between beams = 2.4 m

(Iano & Allen, 2022)

Rafter (Span 10 m)

W= 90 x H= 495 mm

Distance between beams = 1.2 m (A/S, Spændviddetabeller Limtræ 2023)

Rafter 31-45 ° (span 10 m)

W= 140 x H= 495 mm

Distance between beams = 0.6 m (A/S, Spændviddetabeller Limtræ 2023)

Truss (span 10 m)

W= 115 x H=167 mm W= 115 x H=133 mm

Distance between beams = 2.4 m (Andersen, 2009)

Rafter (Max span 8 m)

W= 95 x H= 295 mm

Distance between beams = 0.4 m (Andersen, 2009)

Rafter 31-45 ° (Max span 7 m)

W= 95 x H= 295 mm

Distance between beams = 0.4 m (Andersen, 2009)

Truss (Span 10 m)

W= 45 x H= 145 mm W= 45 x H=95 mm

Distance between beams = <1 m (Andersen, 2009)

Accessibility and distribution of functions 1

This investigation delved into the examination of accessibility and function distribution within a daycare center design, encompassing the initial development concept, tender material specifications, and user needs through a series of design iterations.

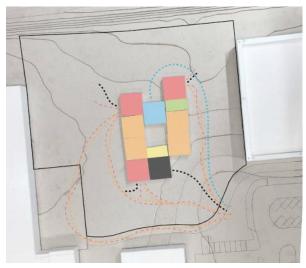
The analysis revealed that the underutilized space at the southeast corner of the plot, adjacent to the parking lot and sports gym, presented an optimal location for more formal and functional rooms such as the kitchen and administration. This strategic placement prioritizes efficient access for deliveries and minimizes disruption to children's play areas.

The investigation also highlighted the importance of the connection between common areas and

Illustration 94: Own Pictures Iderations of different distributions of functions and their accessibility group rooms. Here the transition from the private group rooms to the shared common area was found important and the idea of placing a buffer zone between them was found ideal.

To cater to the distinct needs of each age group, different entrance placements and paths through the site were investigated. The user studies stated the divers needs for the different age groups and it was found in this study that the nursery groups entrance should be separated from the kindergarten entrance and there should be one entrance for each 'tvillinge gruppe'. The 5. iteration was found most interesting and will be the starting point for further investigation's which also enables opportunities for a diversion of the playground into a nursery corner to the northeast and a kindergarten playground towards the school

Ideration 1



PROS

staff entry close to parking

Ideration 2



PROS

Big courtyard

CONS

- Kitchen far away from parking
- Staff room isolated from the common room
- two seperated common rooms

CONS

- Kitchen far away from parking
- Staff room isolated from the common room and group rooms
- Group room isolated from common room

- Goup room
- Common room
- Activity room
- Sleeping room
- Kitchen
- Staff
- Technic

Ideration 5



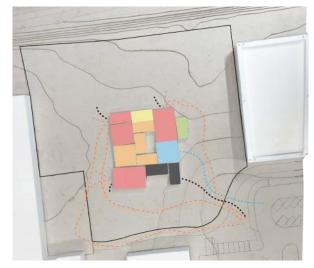
PROS

- Kitchen close to parking
- Long way to group room entre
- Staff entry close to parking
- All group rooms are connected to common room

CONS

- Staff room isolated from the common room

Ideration 3



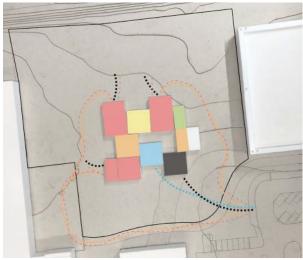
PROS

- Staff entry close to parking
- Staff connection to common room
- All group rooms are connected to common room
- Kitchen close to parking

CONS

- Small courtyard
- Activity room furthest away from the activities in the context

Ideration 4



PROS

- Staff entry close to parking
- Kitcthen close to parking
- Staff entre close to parking

CONS

- Activity room furthest away from the activities in the context
- staff area isolated from the group rooms and main common room

Construction parts effect on LCA

This investigation focused on evaluating the environmental footprint of three different roof constructions within a daycare center design. Building upon the previously established construction principles, the analysis compared surface area, volume, and embodied carbon footprint (GWP) per square meter. The findings revealed that the roof was the most significant contributor to the overall environmental impact.

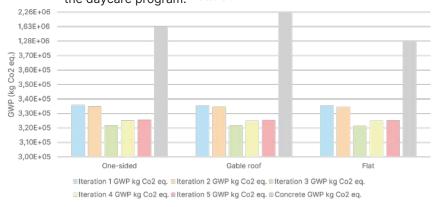
This prominence stems from two factors:

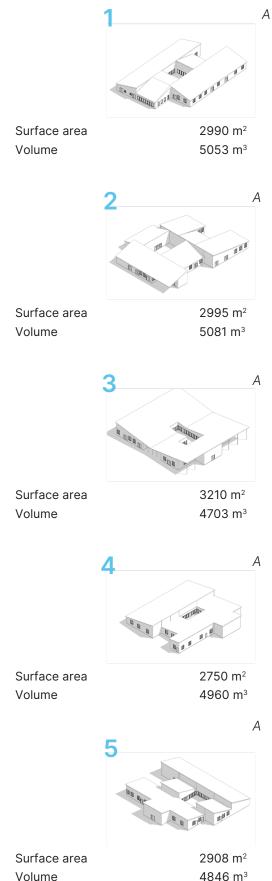
Largest Construction Area: The roof encompasses the largest surface area compared to other building elements.

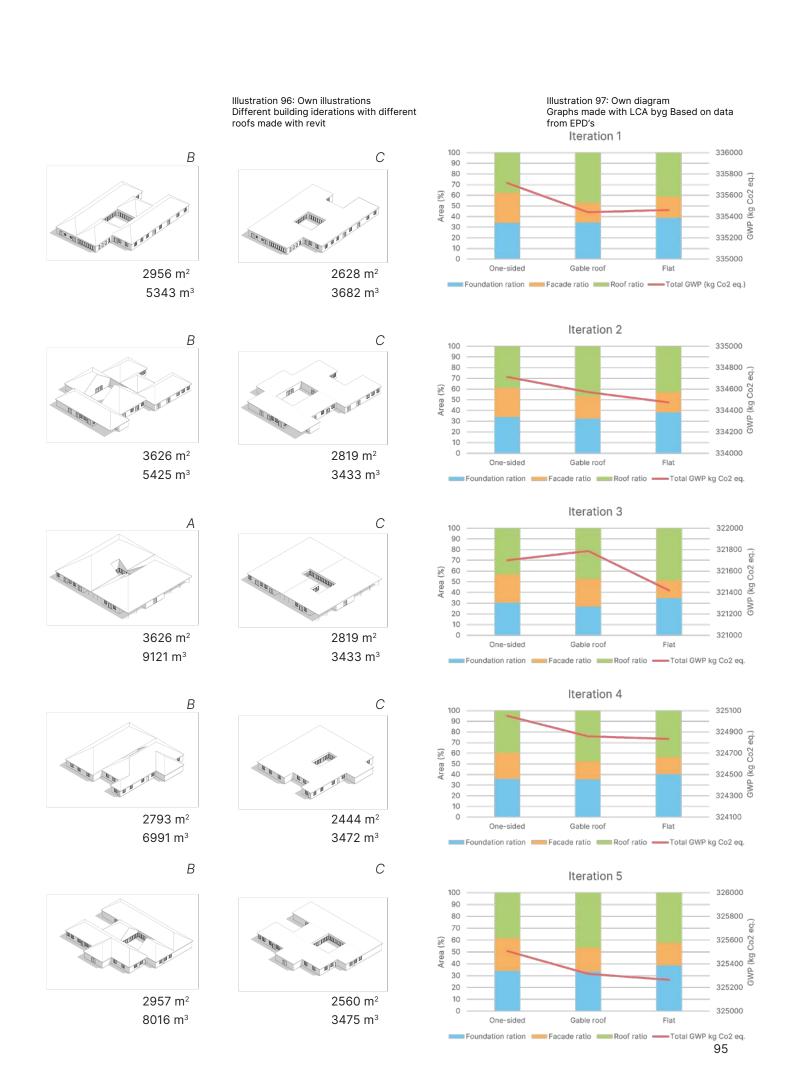
Influence on Wall Area: Roof selection significantly impacts the required wall area.

Among the three roof options, the truss system demonstrated the highest GWP. The foundation followed as the second-largest contributor, with the chosen screw pile foundation necessitating a thicker foundation structure. Walls, conversely, exhibited the least influence on the overall GWP.

Considering these findings, Iteration 5 with either Roof A or B emerges as the most promising design solution. The truss system's height offers potential for exploration, while the possibility exists to reduce wall height while maintaining a child-appropriate building scale in relation to future surroundings. The flat roof option's smaller scale facilitates the incorporation of roof windows. A hybrid approach, combining elements of both roof constructions, could visually represent the internal hierarchy of the daycare program. Total GWP







Programming and flow

This investigation focused on optimizing the internal program distribution of the daycare center design. While the analysis excluded certain functions like the main entrance, its influence on building orientation and contextual integration was acknowledged. Key findings revolved around achieving efficient workflows and caterting to user needs.

The administration area's ideal location emerged

Ideration 5.1

Group room

Group room

Group room

Fin garderobe

Group room

Fin garderobe

WC

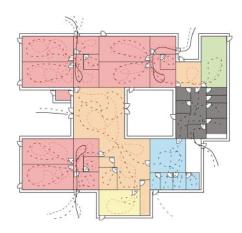
Alrum'

Courtyard

Meeting Office

Froup room

Group roo



PROS

Programming

Flow

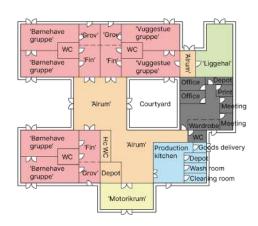
- Access from group rooms to 'alrum' through 'fin garderobe'
- Connection between production kitchen and 'alrum'
- Possible division of 'alrum'

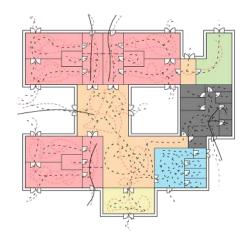
CONS

- No main entrance
- No direct connection between 'alrum' and administration
- No private entrance to administration
- Employee room is a hallway
- Inefficient shape of 'fin garderobe'

as not only near the parking lot and entrance but also directly connected to the common space, facilitating optimal daily flow for the staff. For the nursery groups, the ability to section off a portion of the common area was deemed beneficial, fostering a sense of separation from other groups. In Iterations 5.2 and 5.4 presented a minor logistical challenge: one of the two "tvillingegruppe"

Ideration 5.2





PROS

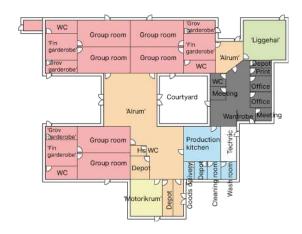
- Access from group rooms to 'alrum' through 'fin garderobe'
- Connection between production kitchen and 'alrum'
- Connection between 'alrum' and administration
- Possible division of 'alrum'

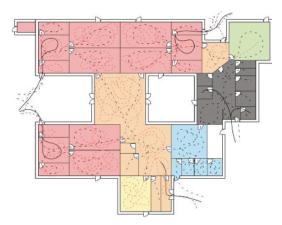
CONS

- No main entrance
- Missing outdoor toilet
- Missing technic room

needed to pass through the "grov garderobe" area to reach the common spaces. Similarly, while the nursery requires close proximity to the "liggehal", direct contact wasn't essential. Since children typically retrieve clothing from either wardrobe area anyway, the 'liggehal' placement held greater significance in relation to these wardrobe locations than the group rooms.

Ideration 5.3





PROS

- Connection between production kitchen and 'alrum'
- Possible division of 'alrum'
- Optimized flow between group rooms and 'fin garderobe', 'grov garderobe' and toilet
- Optimized use of area in 'fin garderobe'

CONS

- No direct connection between 'alrum' and administration
- Direct access from 'børnehavegruppe' and 'vuggestuegruppe' to 'alrum'

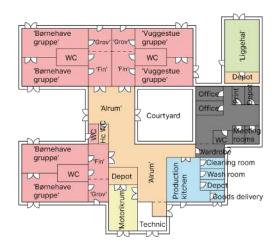
Goup room

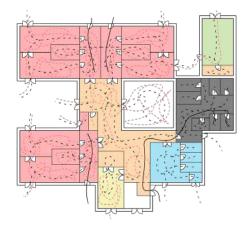






Ideration 5.4





PROS

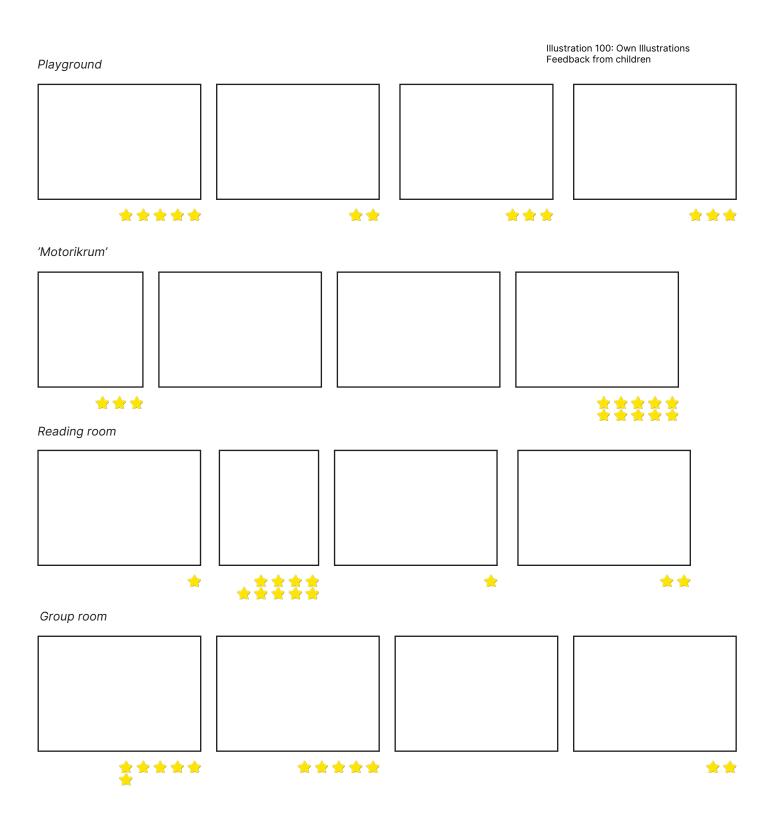
- Connection between production kitchen and 'alrum'
- 'alrum' is divided into smaller spaces
- Connection between 'alrum' and administration
- Access from group rooms to 'alrum' through 'fin garderobe'

CONS

- Some of the group rooms must go through the 'grov garderobe' to get to the 'alrum'
- Group rooms are placed in between the wardrobe and 'liggehal'

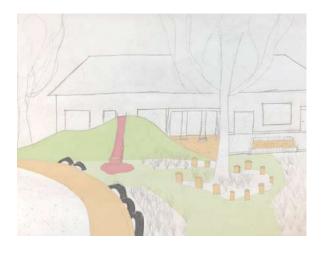
Functions and settings

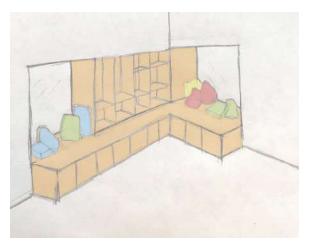
Children perspective

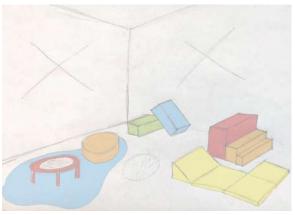


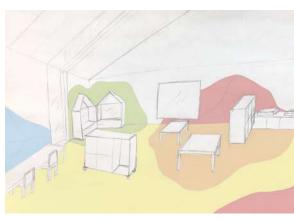
Architectural translation

Illustration 101: Own drawings Different architectural outcomes from the childrens feedback









This study explored user participation in daycare design through a workshop with children from Karolinelunden kindergarten. Children were presented with images of different spaces and asked to identify the most suitable ones for specific activities. Their choices revealed a preference for spaces with engaging elements and bright colors, rather than being influenced by room size or shape. This suggests that children prioritize stimulating environments that enable creative play and align with the daycare's frequently changing thematic elements.

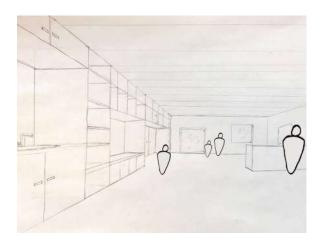
The workshop's key findings were translated into design principles for the final daycare design. These principles included incorporating niches for creative exploration, using bright colors to enhance visual appeal, and prioritizing open spaces for unstructured play. By understanding children's preferences for stimulating elements and open spaces, architects can create engaging environments that cater to the specific needs and desires of the children. The incorporation of niches, colors, and opportunities for free play, as identified by the children, can contribute to a daycare design that fosters creative expression and a positive learning environment.

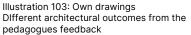
Atmosphere and functionality

Pedagogue Perspective

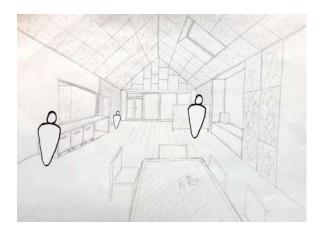
	Illustration 102: Own Illustrations Feedback from the pedagogues

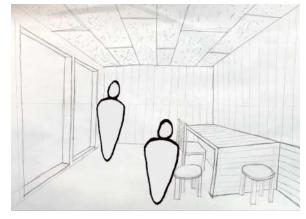
Architectural translation











A design workshop with pedagogues from Karolinelunden kindergarten explored how spaces, interiors, and materials influence daily life. Participants analyzed images of various daycare environments, identifying desirable and unsuitable features. emphasized clear visibility between rooms for supervision, acknowledging the appeal of child-sized elements but highlighting the need to balance them with practicalities like maintenance and safety.

The workshop revealed a prioritization of good acoustics, flexible furniture, and child-friendly spatial arrangements. Features like small houses for creating child-organized spaces and multi-level play areas were praised. Dedicated quiet areas and a variety of materials were seen positively, while child-sized storage solutions and color integration were desired additions. Maintaining good natural light remained a key concern. Pedagogues

These key findings informed the final daycare design principles. Play areas with different levels and storage solutions accessible to both adults and children were incorporated. While acoustics and diverse materials were valued, their functionality, particularly regarding sound absorption, remained paramount. This workshop underscores the valuable insights pedagogues can offer in shaping daycare design.

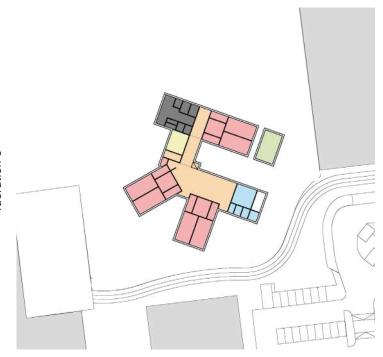
Accessibility and distribution of functions 2

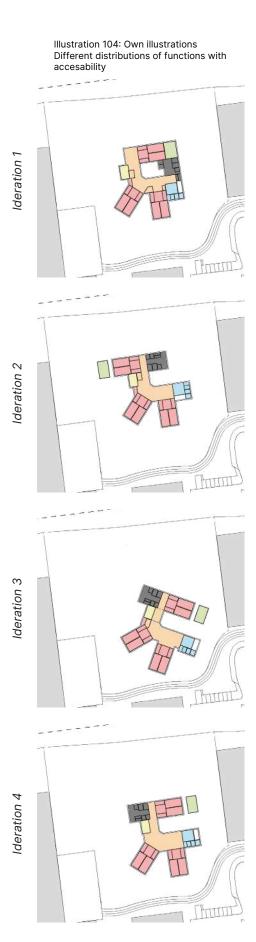
This investigation builds upon previous analyses to synthesize key findings. The earlier program and flow study identified the courtyard as a crucial element for internal circulation. This investigation capitalizes on this finding by proposing an open courtyard concept, which facilitates the inclusion of a main entrance, previously absent. This open courtyard design also allows for the administration area to be directly connected to the common room.

Furthermore, the investigation explores the potential of the "tvillingegruppe" to act as both dividers of the urban area surrounding the building, as well as connectors to the adjacent school and gym.

Insights gleaned from interviews and pedagogical theory highlight the significant fluctuation in children's activity levels throughout their time in the daycare. Consequently, the nursery area, requiring a quieter environment, is positioned in the northeast corner of the site.

Finally, the open courtyard design offers an additional advantage – the potential for future expansion.





Volumen in context

This investigation explores the interplay between volume, height, and the surrounding context. As the adjacent buildings are yet to be constructed, the analysis relies on estimated heights and sizes of these structures. Given the single-story nature of the daycare, it will naturally appear as a low-rise structure compared to the 12m heigh gym. Consequently, the roof design plays a crucial role in establishing a visual connection between the daycare and its surroundings while ensuring that the building doesn't disappear between the two taller structures.

Internally, the roof design can serve as a means to communicate the varying heights within the building and the directional relationships between spaces, particularly connections and pathways.

The aim is to create a sense of hierarchy and distinction within the building's volumes, particularly between the group rooms and the common area.

Furthermore, the design seeks to establish a connection with the surrounding buildings in terms of form and height, while maintaining a focus on the child's scale.

The roof can serve as a visual cue, guiding the eye and movement around the building, reinforcing the hierarchy and directional relationships within the space.

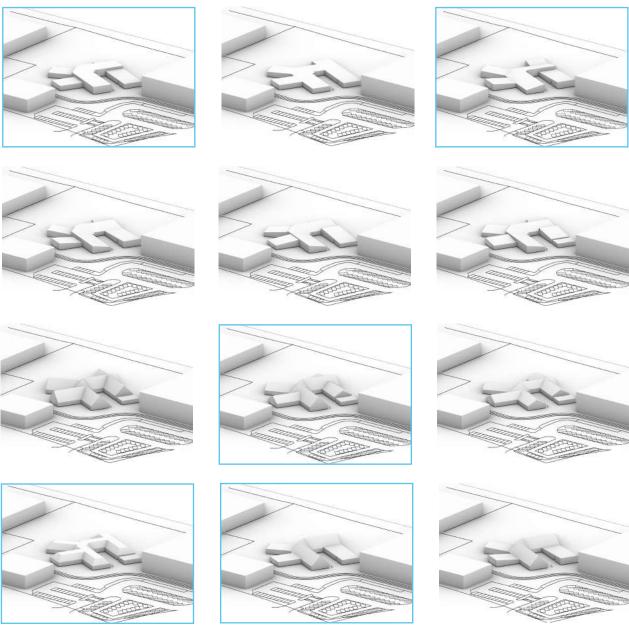


Illustration 105: Own 3D models made in rhino Different building volumes in context

Construction

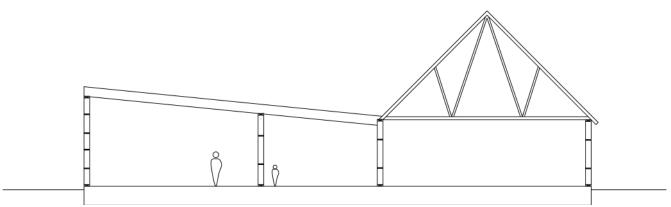
Wall, roof and foundation

This investigation explored various roof assemblies to identify optimal solutions for the daycare design. The focus was on maximizing room programming flexibility while considering the relationship with surrounding buildings.

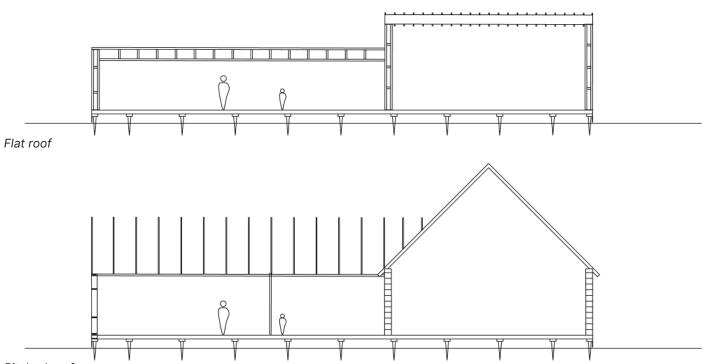
Internal evaluation parameters highlighted the importance of room height in relation to activity levels. The combination of screw foundations and hemp block walls was found to be less ideal due to excessive wall weight.

Achieving a higher ceiling in the common area is possible with either a truss system or a raised wall beneath a flat roof. The single-sided roof, while establishing a level hierarchy, creates a high facade that contradicts the child-scale design philosophy.

The optimal roof design must balance a higher common area ceiling, room programming flexibility, and adherence to the child-scale vision. Both truss systems and raised walls with flat roofs offer potential solutions.



One sided roof combined with pitched roof



Pitched roof

Foundation

The initial design concept envisioned minimal site modification. However, after developing a precise digital 3D model and situating it on the virtual terrain, it became clear that this approach was incompatible with the desired building form. The existing topography resulted in significant foundation height variations, ranging from 0.5 meters at its lowest point to 2.5 meters at its highest.

Consequently, an investigation was undertaken to explore strategies for minimizing foundation height. Four principal approaches were considered:

Excavation around the building: This involved digging out a perimeter trench around the building footprint to create a level foundation surface.

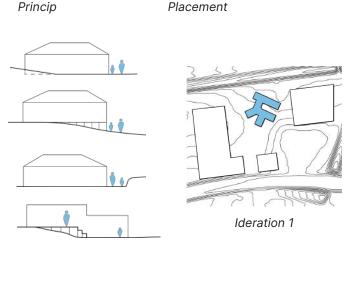
Lowering the building into the ground: This approach involved strategically excavating the site to partially bury the building structure. This could necessitate either an edge foundation or a combination of screw piles and edge foundation at the highest topographic point.

Leveling the entire site: This involved extensive excavation to create a completely flat building platform.

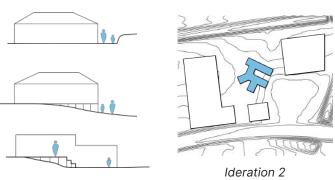
Partial leveling: This involved a more targeted excavation, focusing on lowering only the portion of the site closest to the building.

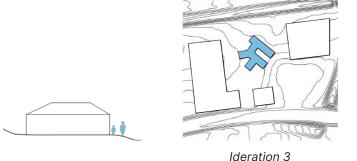
While the ideal approach could vary depending on the building footprint and placement, the design vision prioritized screw pile foundations over concrete foundations. This eliminated the option of lowering the building into the ground (approach 2).

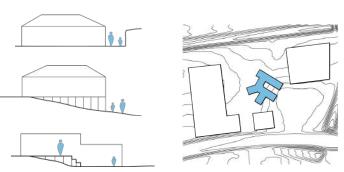
Therefore, the remaining options are either full or partial levelling of the site (approaches 3 and 4) to achieve a more consistent foundation height.



Placement







Ideration 4

Possible future extension

Ideration 1

An investigation explored the possibilities for future extensions to accommodate additional 'tvillinge-gruppe', ensuring the day care's capacity meets future needs. This analysis considered various aspects that could be beneficial for the design, including:

Courtyard Closeness: The initial iteration's courtyard layout with varying degrees of closeness was explored for its potential application in future expansions.

Playground Division: The investigation assessed how future extensions could contribute to the division of the playground into distinct zones.

Extension Directionality: The optimal direction of future extensions was analyzed.

The key finding was that the current building placement would not allow for three additional 'tvillingegrupper'. However, the concept of extending the common area and adding 'tvillingegrupper' alongside it proved favorable. This approach not only aligns well with the desired direction for the 'tvillingegrupper' but also contributes to the effective division of the playground.

The investigation identified a promising solution for future expansion that prioritizes both the functional needs of the additional classrooms and the overall design principles of the daycare.

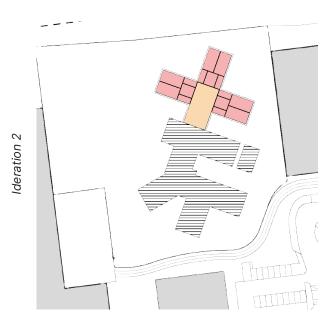


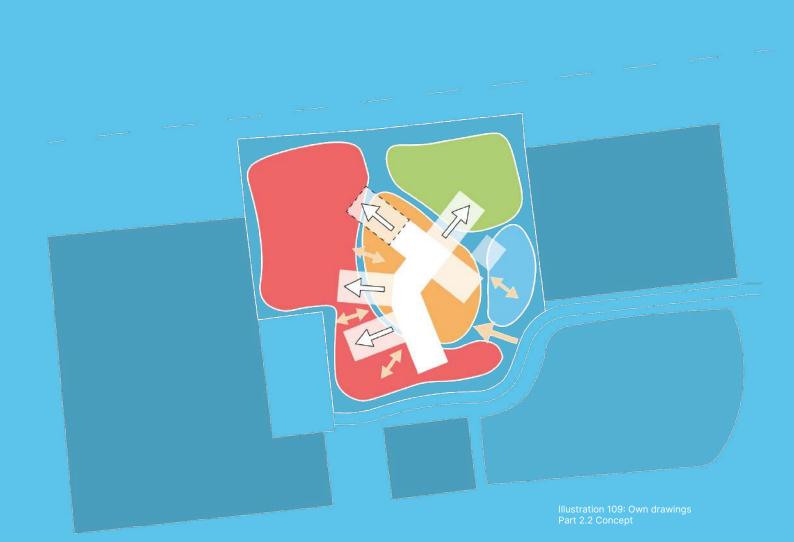


Illustration 108: Own Illustrations
Different possible future extensions

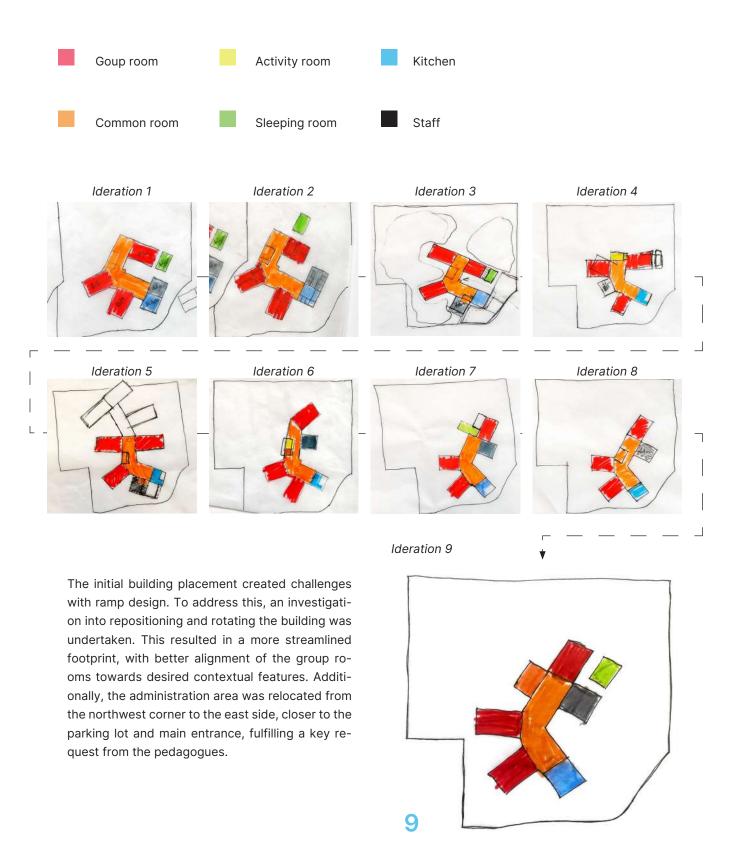
STEP 2.2

Detailing the idea

The next stage dives into the nitty-gritty of the building design, focusing on the finer details of both the interior and exterior spaces. This phase will encompass the precise placement of roof elements like rafters and gutters, window locations, and the design of outdoor areas like the playground, terrace, and ramps. Additionally, the interior detailing of both the group rooms and the common area will be meticulously addressed.

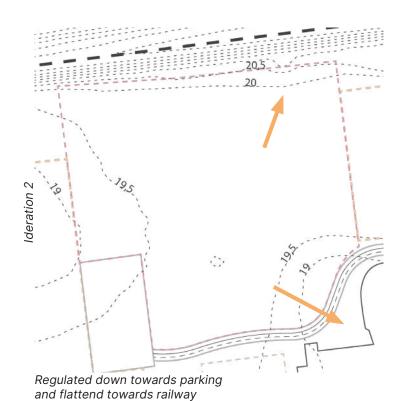


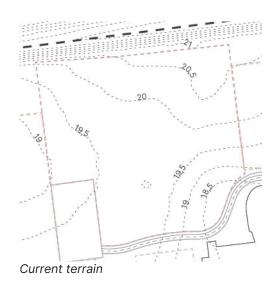
Plan

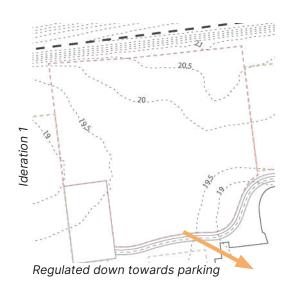


Landscape

Given the challenges associated with raised foundations, a site levelling investigation was conducted. The primary concern was minimizing the ramp elevation and length at the main entrance. Initially, the topography was raised 0.5 meters, but this proved insufficient. Subsequent iterations involved pushing the topography lines upwards the railway in the northeast corner and outwards towards the parking lot. However, the last iteration was deemed unnecessary. Ultimately, the project moved forward with the development of the second iteration that offered the most promising solutions for addressing the ramp requirements.







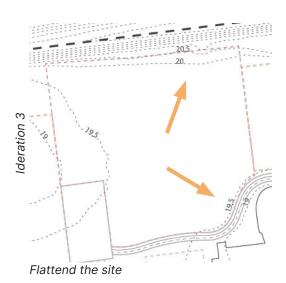


Illustration 111: Own Illustrations Landscape iderations

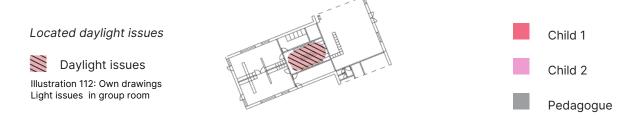
Group room

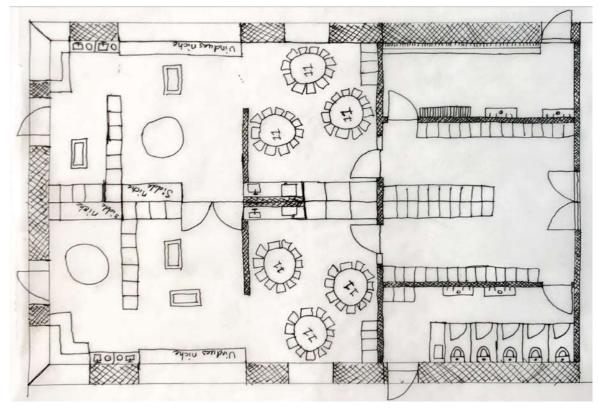
Investigations into the interior design of the 'tvillingegruppe' focused on creating diverse play environments and incorporating engaging niches for the children. A key solution involved transforming the central wall between the two rooms into a large cabinet system. This multifunctional unit facilitated the concealment of the kitchenette and a quiet reading niche.

Furthermore, the room layout was divided into functional zones. Kindergartens received three zones: a table zone, a play zone, and a dedicated quiet reading zone. Nursery groups utilized a two-zone configuration with a table zone and a play zone.

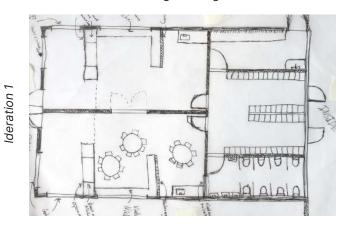
Window placement was strategically considered to integrate niches that could be used for seating both indoors and outdoors, further enriching the play opportunities. The placement of the windows also clearly showed that the 'fin garderobe' were missing natural light and the only way to get that would be from the roof.

The investigation also explored optimal layouts for wardrobes and toilets within the room. The ideal solution involved a central "fin garderobe" flanked by toilets and a "grov garderobe" on each side. This configuration allows both group rooms to access the "fin garderobe" for quick changes when needed, promoting shared functionality and flexibility.

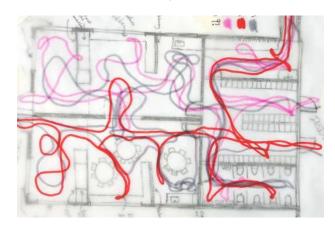




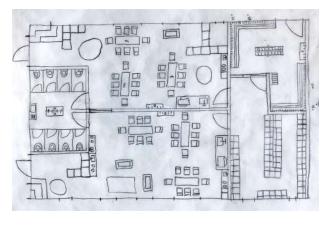




Flow

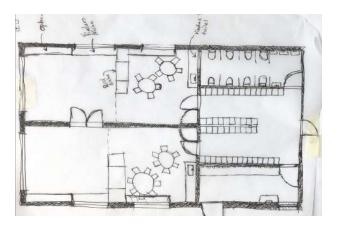


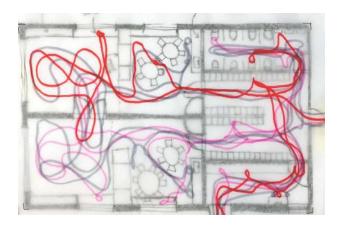
Ideration 2













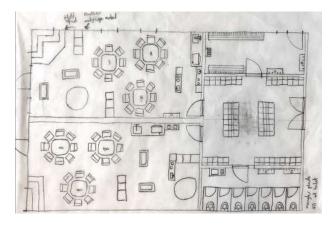




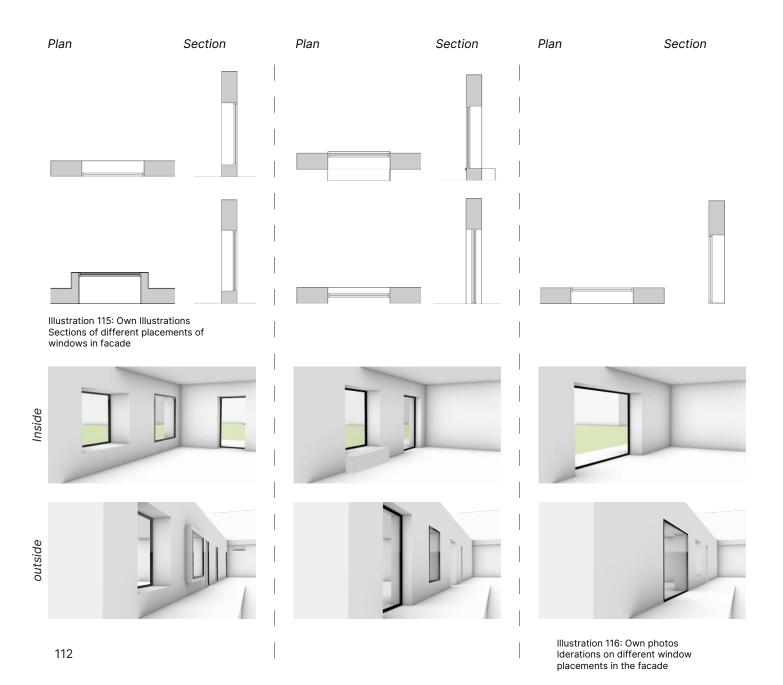
Illustration 114: Own drawings Different group room plan solutions with with flow

Immersion spaces in facade (group room)

A meticulous investigation explored window placement strategies to create niches for seating within the group rooms. Three potential locations were considered: external (flush with the wall exterior), internal (flush with the wall interior), and a window protruding outward from the wall.

The analysis revealed that internal window placement and the protruding window offered the most promising solution. This approach not only yielded

a seating niche on the building's exterior and interior, but also contributed to a more visually interesting facade through the creation of an extruded niche. Additionally, this configuration created a functional niche within the group room itself, enhancing the play environment.



Facade group room

Building upon the exploration of window niches, a further investigation examined their impact on the building's facade. The key finding was that strategically combining internal and external window placements visually fragmented the facade, making it appear less imposing and more relatable to a child's scale. Furthermore, varying the size and

rhythm of the windows served a dual purpose: it ensured children could easily see outside while also echoing the internal fictional spaces within the group rooms. This approach creates a cohesive design language that integrates the interior and exterior environments.

Ideration 1



Ideration 3



Ideration 5



Ideration 2



Ideration 4



Ideration 6



Ideration 7

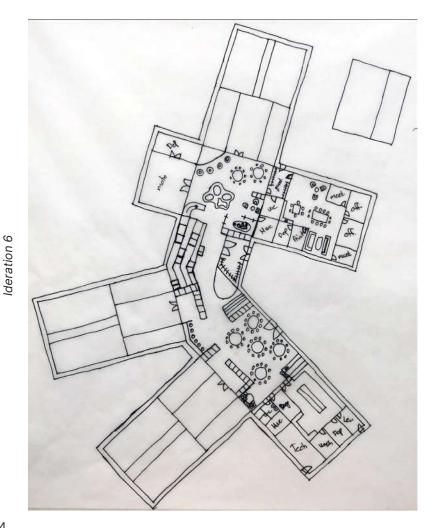


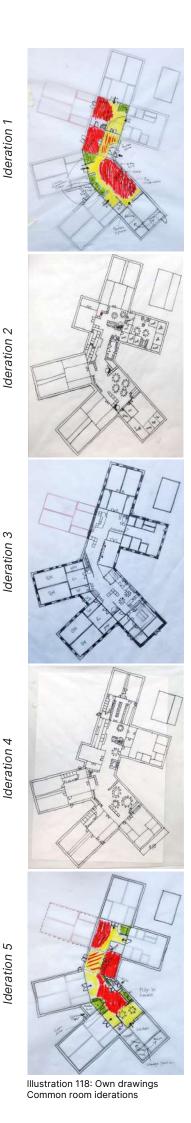
Common room

The investigation focused on transforming the large, open common area into a more functional space with dedicated zones and play niches for the children. User input from interviews with pedagogues played a crucial role in informing the design decisions.

One key element of this investigation was optimizing the placement of the 'motorikrum'. Earlier iterations had encountered challenges in this regard.

A consistent element across all design iterations was the placement of a sizable table zone near the southern end of the room, close to the kitchen and the 'pædagogiske køkken'. Additionally, all iterations emphasized the need for a clear transitional zone between the common area and the wardrobes of the 'tvillingegruppe'.





Ideration 1 Ideration 2





Ideration 3



Illustration 120: Own photos Iderations of facade towards parking

Mirroring the approach for the group rooms, the common area's facade facing the main entrance underwent a window design investigation. The focus here was on maximizing natural light, with three main strategies explored:

Randomized Layout: This involved a less structured arrangement of windows in terms of size and placement.

Tall, Narrow Windows: This concept investigated the use of slender, vertical windows throughout the facade.

Glass Facade: This approach proposed a largely transparent facade with extensive glazing.

Through analysis, the glass facade emerged as the most promising solution. This design prioritizes both clear sightlines and abundant natural light, crucial for the common area. Since most windows face north or northeast, a significant amount of glazing can be incorporated without compromising thermal efficiency.

The investigation additionally highlighted the need for supplementary roof lighting to illuminate areas near the kindergarten group rooms and the space in front of the nursery group room. This combined strategy ensures a well-lit and visually stimulating common area that fosters a sense of openness and connection with the outdoors.

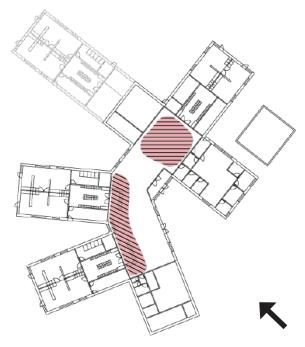
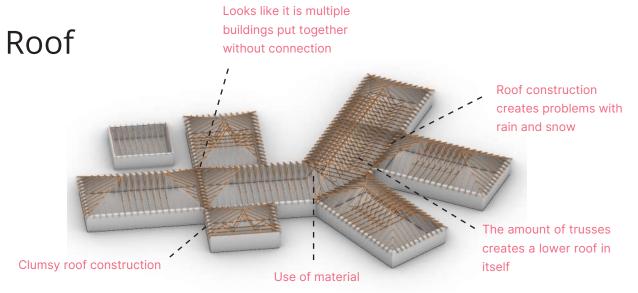
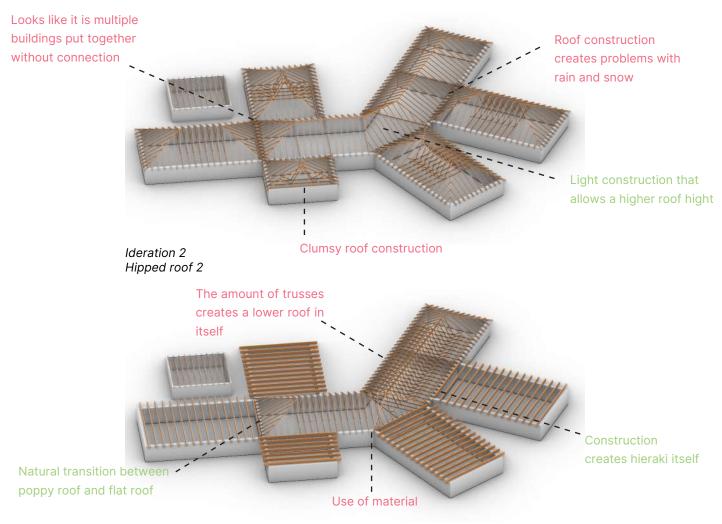


Illustration 119: Own Illustration Light issues in common room



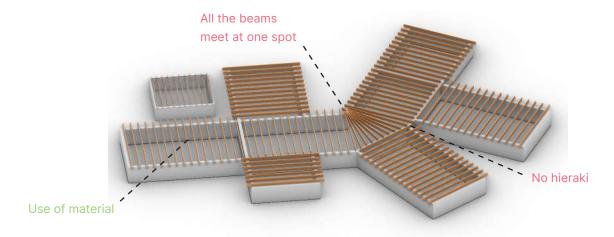
Ideration 1 Hipped roof 1



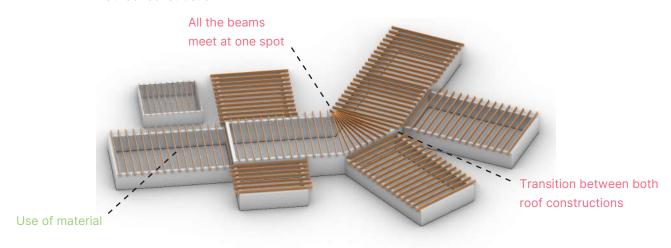
Ideration 3
Combination of hipped roof and flat roof 1

An investigation explored how to best connect the various roof rafters, focusing on the two primary roof types: flat roof and truss system. A key concern identified in earlier construction analysis was the potential for cracking at the facade due to the convergence of numerous rafters at a single point.

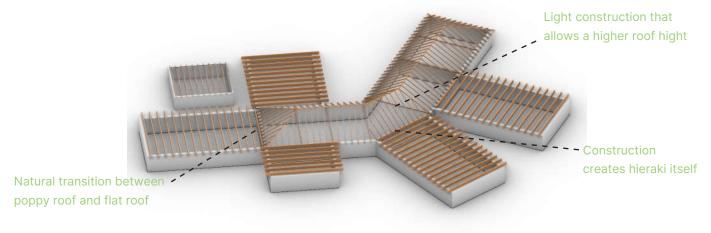
This issue was particularly problematic with the flat roof design. Conversely, the truss system offered the advantage of being divisible into smaller sections, minimizing the number of rafters meeting in one location.



Ideration 4
Flat roof construction



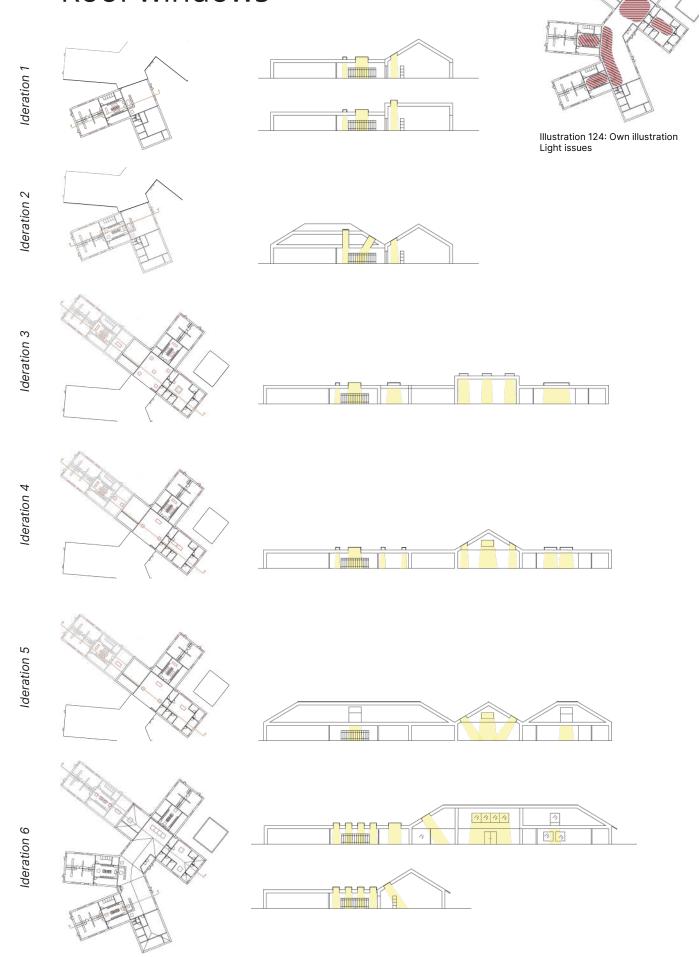
Ideration 5 Flat roof construction with higher middle part



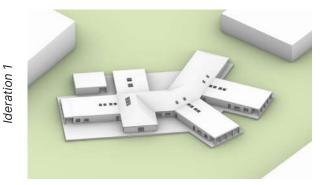
Ideration 6 combination of hipped roof and flat roof 2

The analysis revealed that a combination of a truss system and horizontal rafters presented the most promising solution. This approach not only visually communicates the building's hierarchy but also simplifies the connection points. The trusses can rest upon the perpendicular horizontal rafters, creating a structurally efficient and aesthetically pleasing solution.

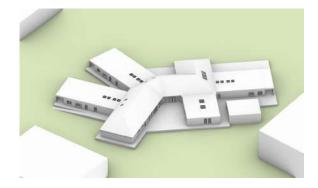
Roof windows



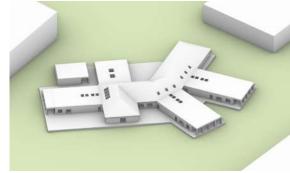
North West



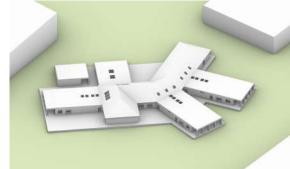
South East

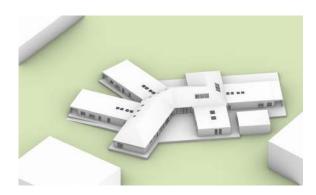


Ideration 2









Ideration 4

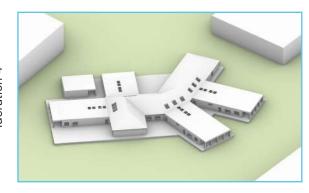




Illustration 125: Own photos placement and size of roof windows in 3D

This investigation focused on incorporating skylights into the daycare's roof design to maximize natural light in specific areas. Skylight placement, design, and size were all carefully considered to achieve optimal light distribution while maintaining aesthetics. Additionally, skylight orientation was identified as a valuable tool for directing light towards designated features within the rooms.

The analysis revealed that flat roofs with strategically placed skylights were ideal for rooms with lower ceilings. Conversely, raised roof areas could benefit from larger skylights to compensate for the increased volume and potentially highlight specific features. This approach ensures a well-lit and visually stimulating environment that supports both functionality and aesthetics.

In essence, the skylight design integrates seamlessly with the overall concept, prioritizing natural light penetration while complementing the spatial hierarchy within the daycare.

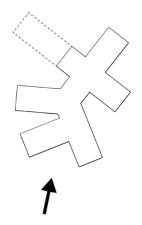
Ramp

Screw pile foundations necessitated ramp access throughout the daycare. Ideally, each 'tvillinge-gruppe' room and all entrances would have a dedicated ramp. Four primary ramps were analysed: one for each kindergarten group, the main entrance, the playground entrance, and upon further investigation the nursery entrance.

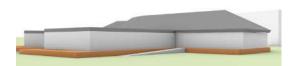
The analysis explored various options including ramps, stairs, small hills, and combinations. The main and playground entrances were envisioned as more than just transitional spaces. Here, the focus shifted towards creating engaging and fluid experiences through the design of the ramps and surrounding areas.

In contrast, the ramps serving the kindergarten groups and the nursery prioritized efficiency and functionality. Their orientation aimed for a direct connection between entrances and the playground, facilitating a smooth morning and afternoon routine.

The investigation revealed an additional need – a dedicated ramp for the nursery leading directly to the toilets from the playground area, as the current layout required them to travel a considerable distance. This additional ramp, similar to those serving the kindergarten groups, would create a more efficient and user-friendly layout.



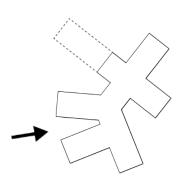
Ideration 1



Ideration 2



Illustration 126: Own photos Ramp ideratios towards south



Ideration 1



Ideration 2

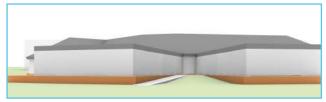
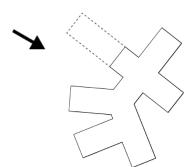
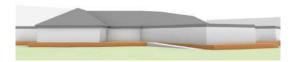


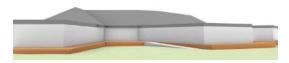
Illustration 127: Own photos Ramp iderations in between group rooms



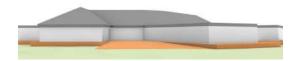
Ideration 1



Ideration 1.1



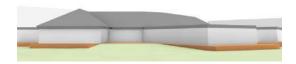
Ideration 2



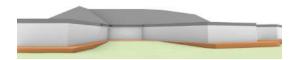
Ideration 2.1



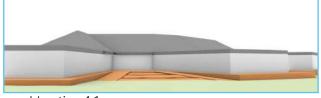
Ideration 3



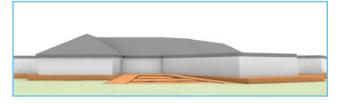
Ideration 3.1

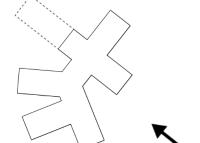


Ideration 4



Ideration 4.1





Ideration 1



Ideration 1.1



Ideration 2



Ideration 2.1

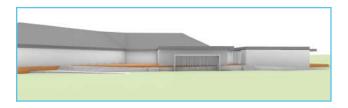


Illustration 128: Own photos Ramp iderations towards parking

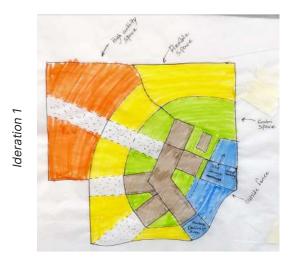
Playground principals

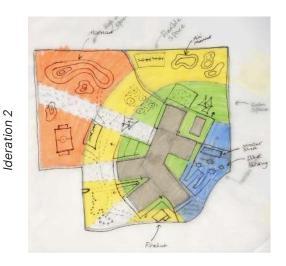
The playground design prioritized a thoughtful division of space to create a variety of play experiences for different age groups. The core concept revolved around increasing activity levels with distance from the building, with the most active zone positioned near the school plaza.

Conversely, the area closest to the parking lot served a more formal purpose, accommodating functional elements like bike parking and waste disposal. The 'tvillingegruppe' extension was envisioned as either a free space or a pathway dividing the playground into smaller zones for focused play.

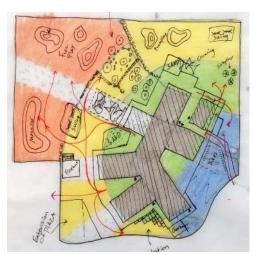
Drawing inspiration from workshops with children at Karolinelunden kindergarten and referencing existing daycare centers, the design incorporated a range of age-appropriate play environments. The active zone for kindergarteners featured a mooncar track and wild nature areas to encourage imaginative play. The flexible zone offered a mix of activities with elements like a fire pit, sandbox, swings, and sensory gardens. Finally, the calm zone closest to the building provided a space for quieter activities with tables and potentially a small sandbox. Temporary coverings were strategically placed in the calm and flexible zones for sun protection or shelter.

The overall layout considered both the flow from the building and the surrounding context. While the internal design minimized major thoroughfares, the playground plan strategically integrated a combination of main paths and smaller branches, creating a smooth transition from the building to the various play zones.



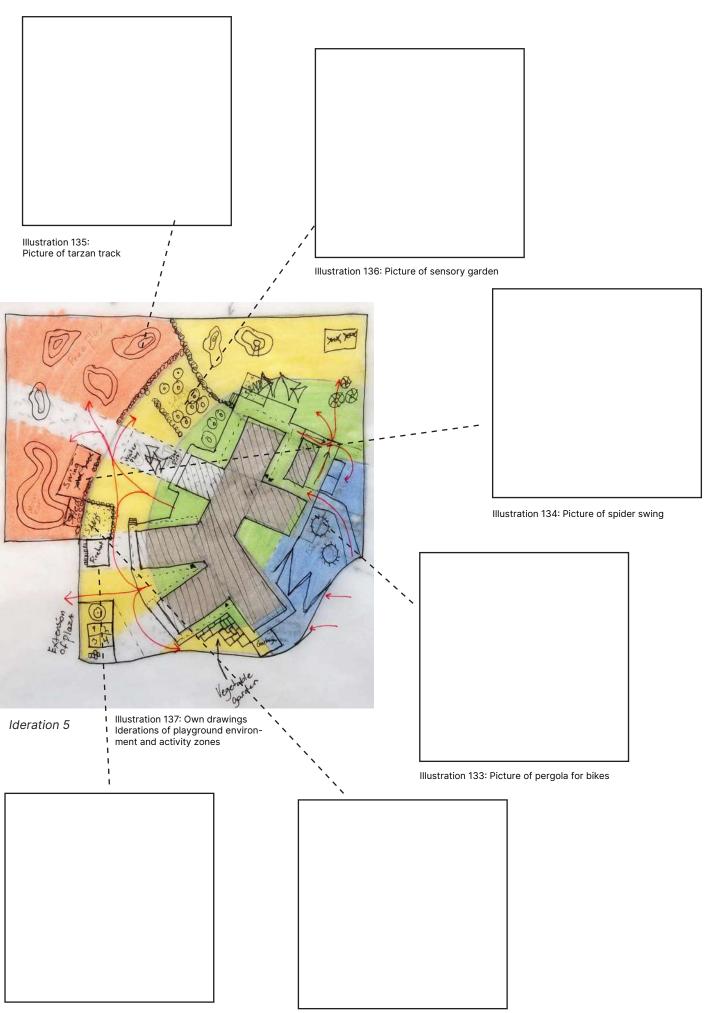






deration 4

Illustration 130: Own drawings Iderations of playground environment and activity zones



Meeting between roof and facade







An investigation explored both fascia and gutter designs. The focus was twofold: ensuring the building's scale relates harmoniously to the children who will use it and utilizing these elements to add visual interest and detail to the facades.

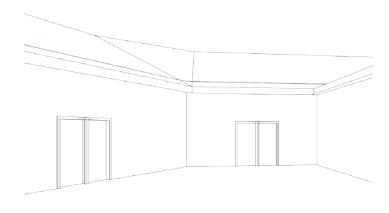
Fascia

An investigation into fascia and overhang design aimed to strike a balance between child-friendly scale and mitigating building overheating. Three options were explored: a minimal overhang, a fullheight wall, and a wind spoon element.

The full-height wall appeared bulky and disconnected from the common area's raised roof. The

wind spoon lowered the facade and was visually connected to the main building but offered no window shading.

The overhang solution emerged as the most successful. It lowered the facade visually, provided window shading, and enhanced the facade's visual interest. Additionally, it created a design coherence with the main building's raised roof. This combination of functionality and aesthetics made the overhang the preferred choice.



Hidden in the wall and roof

Gutter

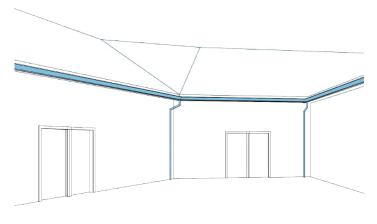
To optimize aesthetics, maintenance, and compatibility with the two roof types, an investigation into gutter and downpipe placement was conducted. Three main options were considered:

Concealed Gutters: These integrate seamlessly within the wall and roof, offering a clean aesthetic. However, maintenance is highly challenging, and leaks could potentially damage the entire building structure.

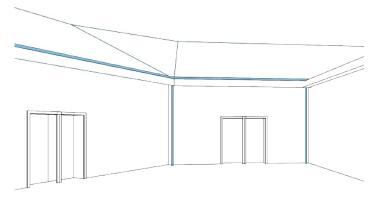
Semi-Concealed Gutters: Partially hidden within the roof with exposed downpipes, this option avoids the full aesthetic integration of concealed gutters while still presenting maintenance difficulties and potential leakage risks. Additionally, the exposed downpipes could disrupt the facade's visual flow.

Traditional External Gutters: This system features external gutters and visible downpipes. While it minimally contributes to the overhang, it simplifies maintenance and replacement without compromising the building structure. The exposed downpipes, similar to the semi-concealed option, can add visual interest and break up the monotony of the facade.

Based on the evaluation criteria, the traditional external gutter system emerged as the most favorable solution. It offers a balance between aesthetics, ease of maintenance, and compatibility with both roof types. The exposed downpipes were also seen as a positive element, contributing to the facade's visual appeal.



Traditional on the outside of the bulding



Hidden in the roof with visual downpipes

Conclusion

Stenlængegaard Daycare Institution: An Integrative Approach to Sustainable Design

Stenlængegaard Daycare Institution is a design proposal that harmoniously integrates environmental sustainability, specifically through LCA, with social sustainability principles. This synergy is aimed at creating a cohesive and sustainable architectural design. The project's guiding problem statement is:

"How can the building design of the next generation of Daycare centers take into consideration the wellbeing of children and pedagogues in a socially sustainable manner, while still being environmentally sustainable. How can we ensure continued flexibility in relation to speciality, materiality, and functionality to accommodate future functions and users of the building, all while adhering to the stringent GWP regulations of 12 kg $\rm CO_2/m^2$ per year or less?"

User-Centric Design and Functional Programming

The design process actively involved the future users of the building - children and pedagogues - whose feedback significantly informed the development phase. This collaborative approach facilitated the creation of diverse play environments,

including niches for immersion and activity spaces characterized by physical engagement. The functional programming of the daycare center ensures smooth transitions throughout the building, from group rooms, through the 'fin garderobe', and into the common room, thereby enhancing navigability and user experience. Color-coded 'tvillingegrupper' further aid in fostering a sense of belonging and orientation among the children. Moreover, the common room is designed for multifunctional use, extending the building's utility beyond regular daycare hours, thus benefiting the broader community, and optimizing the building's usage. To optimize for future possible uses all constructions are dimensioned so that the building envelope is the loadbearing wall. This means that the walls in between is flexible and can be moved if necessary. Therefore the structural system makes It flexible in adapting to possible new functions.

Integration of Social and Environmental Sustainability

The interplay between social and environmental sustainability is reflected in the building's construction and materiality. The design strategically creates distinct areas and zones tailored for various uses, all while adhering to strict environmental regulations. Central to this approach is the use of biobased and reusable/recycled materials. This material strategy not only meets the goal of

maintaining a GWP below 12 kg $\rm CO_2/m^2$ per year achieving 9.3 kg $\rm CO_2/m^2$ per year but also achieves a high architectural standard of spatial quality. The hierarchical arrangement of the building, with a clear delineation between the main body and the wings, underscores the design's heart the common room.

Innovative Foundation and Material Usage

The utilization of a reusable screw foundation is a notable feature, providing terraces that facilitate calm activity zones where children can engage in imaginative play without interference from playground activities. This foundation choice also promotes a transition between the building, playground, and surrounding context, fostering interactions and gatherings.

In summary, the Stenlængegaard Daycare Institution exemplifies a sophisticated approach to daycare design, balancing stringent environmental criteria with the need for socially sustainable, user-friendly spaces. The project demonstrates how integrative design practices can create multifunctional, sustainable environments that cater to both current needs and future adaptability.

Reflection

In the process of designing a daycare center that integrates principles of social sustainability and LCA, numerous factors require careful consideration. These elements are investigated and analyzed throughout the design development phase using the method known as the problem-solution space. This approach has revealed interdependent studies that impact each other in both beneficial and adverse ways, necessitating difficult decision-making.

A fundamental aspect from the inception of this project has been materiality and its significance for the users, particularly their experience of spatiality and materiality. Unfortunately, the depth of this investigation was compromised compared to initial aspirations due to challenges in engaging with multiple daycare centers. Limited availability of time for participation from these institutions hindered broader data collection. Nevertheless, the one kindergarten that participated provided valuable feedback during a workshop, although the specific nature of their responses limits generalizability. To achieve a more comprehensive understanding of how materiality and spatiality affect both children and pedagogues, further engagement with additional daycare institutions is needed.

User involvement was integral to the process, incorporating both interviews and workshops to gather feedback on materiality and spatiality. However, conducting interviews presented challenges as respondents highlighted positive aspects of their daycare centers, possibly due to their adaptation to existing issues. When probed about negative aspects, feedback was minimal,

exemplified by a single complaint about a folding door in the meeting room. During the workshop, it became apparent that responses from some of the childrens were influenced by others' choices, which could have been mitigated by individual responses. Moreover, pedagogues feedback often conflated materiality and spatiality, suggesting the need for more specific imagery and targeted questions in future workshops to avoid miscommunication and gather precise feedback.

The problem-solution space method revealed that a solution addressing one problem might create another in a different context. For instance, opting for screw foundations to reduce the carbon footprint and global warming potential introduced issues with building placement and elevation on site. To prevent moisture accumulation, the building's elevation needed to be raised, resulting in a design where the structure was significantly elevated above ground in some areas. This necessitated re-evaluating the building shape, foundation type, and site placement, leading to a compromise of leveling out the terrain which maintained the design concept while addressing the new challenges.

Life cycle assessment was a focal point throughout the design process, utilizing tools like BE18 and BSim for verification. This approach identified potential issues, such as window and heating problems, late in the process. Although these tools serve as validation mechanisms, the late-stage discovery of such issues underscores the need for continuous evaluation to ensure compliance with regulations and optimal building performance.

The choice of a lightweight construction, while known to have low thermal capacity, was validated using BSim, revealing high sensitivity to temperature variations. To reduce this, incorporating materials with higher thermal storage capacity, such as reused bricks, is being considered. This adjustment not only addresses thermal capacity concerns but also enhances materiality, a factor important to users.

A distinctive feature of the design is a poppy roof over the common room, chosen for its aesthetic and spatial benefits despite having the highest global warming potential among the alternatives. It remains uncertain if alternative roof designs, such as a flat roof, could have provided better LCA results while achieving the desired room height. Further investigation into optimal roof constructions during the final design stages could have provided better solutions.

The ability to subdivide the common space into different rooms was a recurrent user request. While the current design allows for different zones using movable interiors, it does not accommodate multiple enclosed rooms, which are essential for certain activities. Addressing this could enhance the building's versatility for various uses, including after-hours activities, thus maximizing its utility. Future work will focus on optimizing the design to fully incorporate specific interior solutions that support diverse activities and enhance the building's flexibility.

Bibliography

Books

Andersen, Jørgen.M. (2009) Træspær 1: Spær med hulplader. Kgs. Lyngby:: Træinformation.

Coninck-Smith, N. de (2012) Barndom og Arkitektur: Rum til Danske Børn igennem 300 år. 2. oplag. Århus, Danmark: Klim.

COWI, JJW Arkitekter and Workz (2010) Modelprogram for Daginstitutioner Vol 1. Kbh.: Erhvervs- og Byggestyrelsen og Realdania.

Grafe, C. et al. (2018) Orphanage Amsterdam building and playgrounds. Amsterdam: Architectura & Natura.

lano, J. and Allen, E. (2022) The architect's studio companion: Rules of thumb for preliminary design. Hoboken, NJ: John Wiley & Sons, Inc. page 105 and 108.

Lawson, B. (2005) How designers think: The design process demystifyed. Oxford: Architectural.

Munch-Andersen, J. (2008) TRÆ 56: Træskelethuse. Kgs. Lyngby, denmark: Træinformation.

Ringsmose, C. and Staffeldt, S.R. (2023) Rum og læring for de mindste Vol 1. udgave. 3. oplag. Aarhus, Danmark: Dafolo.

Journal

Assem, H.M., Khodeir, L.M. and Fathy, F. (2023) 'Designing for human wellbeing: The integration of neuroarchitecture in design – a systematic review', Ain Shams Engineering Journal, 14(6). doi:10.1016/j.asej.2022.102102.

Duff, C. (2015) 'Atmospheres of recovery: Assemblages of health', Environment and Planning A: Economy and Space, 48(1), pp. 58–74. doi:10.1177/0308518×15603222.

Eklova, K. (2020) 'Sustainability of buildings: Environmental, economic and Social Pillars', Business & T, X(2), pp. 2–11. doi:10.14311/bit.2020.03.01.

Galindo, P.G. and Rodríguez, J.A.C. (2000) ENVIRONMENTAL AESTHETICS AND PSYCHOLOGICAL WELLBEING: RELATIONSHIPS BETWEEN PREFERENCE JUDGEMENTS FOR URBAN LANDSCAPES AND OTHER RELEVANT AFFECTIVE RESPONSES, 4.(1).

Heiselberg, P. (2007) Integrated Building Design, Aalborg Universitets Forskningsportal. Available at: https://vbn.aau.dk/ (Accessed: 04 March 2024).

Larsen, V.G. et al. (2022) 'What are the challenges in assessing circular economy for the built environment? A literature review on integrating LCA, LCC and S-LCA in life cycle sustainability assessment, LCSA', Journal of Building Engineering, 50, p. 104203. doi:10.1016/j.jobe.2022.104203.

McDONOUGH, W. and BRAUNGART, M. (2002) Cradle to cradle: Remaking the way we make things. New York, New York: North Point Press.

Rasmussen, F., Birkved, M. and Birgisdóttir, H. (2019) 'Upcycling and design for disassembly – LCA of buildings employing circular design strategies', IOP Conference Series: Earth and Environmental Science, 225, p. 012040. doi:10.1088/1755-1315/225/1/012040.

Sántha, E., Hvejsel, M.F. and Entwistle, J.M.K. (2022) Tectonics of human well-being: Describing architecture in terms of constructed spatial gestures and their impact - architecture, structures and construction, SpringerLink. Available at: https://link.springer.com/article/10.1007/s44150-022-00047-8 (Accessed: 26 February 2024).

Municipality papers

Center for plan og miljø, A. (2021) Vol 1, Lokalplan 083.2. Næstved, Næstved: Næstved kommune.

RUM, A. (2023) Vol 1. 03.07.2023, 4. Funktionsprogram, Stenlængegård Daginstitution. 03.07.2023. Næstved , Danmark: Næstved kommune.

In text: (RUM, 4. Funktionsprogram, Stenlængegård Daginstitution 2023)

RUM, A. (2023a) Vol 1. 03.07.2023, 6. Rumskemaer, Stenlængegård Daginstitution. 03.07.2023. Næstved, Danmark: Næstved kommune.

In text: (RUM, 6. Rumskemaer, Stenlængegård Daginstitution 2023

Websites

A/S, L. (2023) 'Spændviddetabeller Limtræ'. Hirtshals: www.lilleheden.dk.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.lilleheden.dk/Files/Files/Sp%C3%A6ndviddetabel/Lilleheden_Spaendviddetabel DK2023 2 45mm.pdf

Bygningers Klimapåvirkninger, V. om (2023) Kort Om Kravene, Videncenter om Bygningers Klimapåvirkninger. Available at: https://byggeriogklima.dk/klimakrav/kort-om-kravene/ (Accessed: 04 March 2024).

Bæredygtigt Byggeri, R. for (no date) Kort om DGNB, Rådet for Bæredygtigt Byggeri. Available at: https://rfbb.dk/dgnb (Accessed: 26 February 2024).

Daginstitution Børnegården bison (no date) Sweco Denmark. Available at: https://www.sweco.dk/showroom/daginstitution-boernegaarden-bison/(Accessed: 07 February 2024)

Echo (no date) EcoCocon. Available at: https://ecococon.eu/dk/element (Accessed: 27 May 2024).

Forsyningsministeriet, K.-, Energi-og (2014) Lov nr 716 AF 25/06/2014, klima-, energi- og forsyningsministeriet, Retsinformation. Available at: https://www.retsinformation.dk/eli/lta/2014/716 (Accessed: 26 February 2024).

Frandsen, L. (2023) Flyt til næstved kommune: 10 Gode Grunde, Næstved Kommune. Available at: https://www.naestved.dk/flyt-til-naestved/10-gode-grunde-til-at-flytte-til-naestved (Accessed: 09 February 2024).

Guiden, M. (2023) Hvad er montessori?, Montessoriguiden. Available at: https://montessoriguiden.dk/hvad-er-montessori/ (Accessed: 26 February 2024).

Industri, D. (2022) Hvad Betyder Indførelsen af klimakrav I bygningsreglementet for dig?, DI Byggeri. Available at: https://www.danskindustri. dk/brancher/di-byggeri/nyheder/arkiv/nyheder/2022/10/hvad-betyder-indforelsen-af-klimakrav-i-bygningsreglementet-for-dig/ (Accessed: 26 February 2024).

Karolinelunden (2023) Bjerg Arkitektur. Available at: https://bjerg.nu/project/karolinelunden/ (Accessed: 19 February 2024).

Klimakrav (LCA) I bygningsreglement (no date) Social- og Boligstyrelsen. Available at: https://sbst.dk/byggeri/baeredygtigt-byggeri/nation-al-strategi-for-baeredygtigt-byggeri/klimakrav-lca-i-bygningsreglementet (Accessed: 22 February 2024).

Lange, E.L. (2006) Reggio Emilia, landsforeningen for socialpædagogik. Available at: https://www.lfs.dk/732 (Accessed: 26 February 2024).

Larsen, J.L. (2024) Næstved Kommunes Indbyggertal, Næstved Kommune. Available at: https://www.naestved.dk/kommunen/tal-og-fakta/ind-byggertal#indbyggertal-2024-bc (Accessed: 09 February 2024)

Mcleod, S. (2023) Qualitative vs quantitative research: What's the difference?, Simply Psychology. Available at: https://www.simplypsychology.org/qualitative-quantitative.html (Accessed: 21 February 2024).

Natural building, I.H. (2023) 'Installation Guide, The insulating hemp block for building, renovating and partitioning'. Fernelmont: ISOHEMP. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.isohemp.com/sites/default/files/fichiers/isohemp_installation_guide_en_2023.pdf

Social- og Boligstyrelsen, københavn (2006) bygningsreglementet, 5.3 lavenergihuse. Available at: https://historisk.bygningsreglementet.dk/brs98_09_id504/0/42 (Accessed: 26 February 2024).

EPD's

A/S, B.B.A. (2023) 'BGreen-it sedum mats, EPD'. Gørlev: EPD Danmark .

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/ambj0mqe/md-23201-en.pdf.chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/ambj0mqe/md-23201-en.pdf.chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/ambj0mqe/md-23201-en.pdf.chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/ambj0mqe/md-23201-en.pdf.chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/ambj0mqe/md-23201-en.pdf.chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://extension.chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://extension.chrome-extension://efaidnbmnnibpcajpcglclefindmkaj/https://extension.chrome-extension://efaidnbmnnibpcajpcglclefindmkaj/https://extension.chrome-extension://efaidnbmnnibpcajpcglclefindmkaj/https://extension.chrome-extension://efaidnbmnnibpcajpcglclefindmkaj/https://extension.chrome-extension://efaidnbmnnibpcajpcglclefindmkaj/https://extension.chrome-extension://extension.chrome-extension://extens

A/S , L. (2022) 'Glulam construction wood products of spruce, EPD'. Hirtshals: EPD Danmark .

 $chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pim.starkgroup.dk/media/pzglfpb4/epd_limtrae_2022_md-22038-en.pd-f?rnd=133141922440870000$

A/S, N. (2024) 'Tørret og høvlet konstruktionstræ, EPD'. Nørager: EPD Danmark.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/agckzn0w/md-24059-da.pdf

A/S, T. (2022) 'Troldtekt 35 mm Natural Grey based on FUTURECEM - painted, EPD'. Berlin: IBU - Institut Bauen und Umwelt e.V.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/5sxp0k2u/md-22051-en.pdf

A/S, T. (2022a) 'Troldtekt. Natural Wood, painted, EPD'. Berlin: IBU - Institut Bauen und Umwelt e.V.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/hwanplfm/md-22053-en.pdf. www.epddanmark.dk/media/hwanplfm/md-22053-en.pdf. www.epddanmark.dk/media/hwanplfw/media/hwanplfw/media/hwanplfw/media/hwanplfw/media/hwanplfw/media/hwanplfw/media/hwanplfw/media/hwanp

A/S, T. (2022b) 'Troldtekt 35 mm Natural Grey based on FUTURECEM - unpainted, EPD'. Berlin: IBU - Institut Bauen und Umwelt e.V.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/lbflnbtl/md-22052-en.pdf and the control of the control

A/S, U. (2028) 'UNI-GREEN BETON, EPD'. Vejle: The Norwegian EPD Foundation.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epd-norge.no/getfile.php/1351107-1709044466/EPDer/Byggevarer/Ferdig%20betong/NEPD-5330-4650_UNI-GREEN-BETON--C35-45-Moderate-Environmental-Exposure-Class-%281%29.pdf

A/S, W. (2022) 'Woodfiber AIR, EPD'. Kristinehamn: EPD Danmark .

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/qv3ety33/md-22017-en.pdf

ApS, S.K. (2022) 'Stråtag, danske tagrør, EPD'. Aarhus C: EPD Danmark .

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/gpijy512/md-22033-da_rev1.pdf

DS, S.A. (2021) 'Structural steel, EPD'. Hobro: EPD Danmark.

 $chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/1ijnni3p/md-21007-en_ds-st%C3\%A5lkonstruktioner.pdf$

DS , S.A. (2023) 'DS Stålprofil Profiled Steel Sheets and Coverings - Precoated, EPD'. Hobro: EPD Danmark.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/htspjgln/md-23084-en.pdf

Gamle, M.A. (2023) 'Reused bricks (whole and half), EPD'. Svendborg: EPD Danmark.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/qnynbomw/md-23003-en_rev2.pdf

Give , S.A. (2022) 'Structural steel, EPD'. Brande: EPD Danmark .

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epddanmark.dk/media/rphaiaue/md-20042-en_rev1.pdf

International, L. (2023) 'Leca® 10-20 Plads Vest, Leca Denmark, EPD'. Oslo: The Norwegian EPD Foundation.

 $chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.leca.dk/sites/leca.dk/files/pdf/NEPD-4158-3390_Leca--10-20-Plads-Vest-Leca-Denmark-.pdf$

Ltd, T. (2020) 'Oriented strand board, EPD'. Inverness: The International EPD® System.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.moelven.com/globalassets/inriver/documents/norbord-inverness-osb-epd-200210-signerad.pdf

S.A., I. (2021) 'ISOHEMP, EPD'. Fernelmont: Service public fédéral Santé publique, Sécurité de la Chaîne alimentaire et Environnement .

 $chrome-extension://efaidnbmnnnibpcajpcg|clefindmkaj/https://cdn.shopify.com/s/files/1/0754/5684/0023/files/b-epd_21-0078-001-00-00-fr_isohemp_pal36_signed.pdf?v=1707825867$

TEX GmbH & Co., S.K. (2019) 'Wood based panels, EPD'. Berlin: IBU - Institut Bauen und Umwelt e.V.

 $chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://riisfort.dk/Files/Images/Filer%20til%20download/EPD/EPD%20Swiss%20Krono%20 MDF%20og%20HDF_%20r%C3%A5%20og%20melaminbelagte%20(10.06.24).pdf?_gl=1*1ecmgqk*_up*MQ..*_ga*MTQwNzE0NTMzMS4xN-zEyOTA2OTg4*_ga_95RT0RZE6T*MTcxMjkwNjk4NS4xLjAuMTcxMjkwNjk4NS4wLjAuMA$

Umwelt, I.B.U. und (2023) 'KRINNER Ground Screws, EPD'. Berlin: Institut Bauen und Umwelt e.V. (IBU).

 $chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://mcusercontent.com/da26218cf8eafcbeb50aaa31c/files/68d75f44-2888-1831-f908-a646184e59a6/KRINNER_Ground_Screws.pdf$

Végvári, F. and AB, C. (2023) 'EKOLUTION® HEMP FIBRE INSULATION, EPD'. Stockholm: EPD International AB.

chrome-extension://efaidnbmnnnibpcajpcg|clefindmkaj/https://api.environdec.com/api/v1/EPDLibrary/Files/e3fbe4ab-0dda-45ec-8d04-08dc-0c71a3ba/Data

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Appendix

<u>Britt</u>

Lige den igang

Victor

Jeg tager bare lige noter imens.

Madalina

Det er helt i orden

Britt

Så finder jeg lige det vi gerne vil spørge om

Madalina

Jа

Britt

Vi er jo i gang med eller skal til at i gang med at skrive Vores speciale, hvor Vi har tænkt os, at vi gerne vil lave en daginstitution. Og Vi har fundet et udbudsmateriale Sådan konkurrence ovre i Næstved, som vi vil tage udgangspunkt i.

Madalina

Ja

<u>Britt</u>

Og så vil vi gerne have fokus på, hvordan de her nye krav, der står til i forhold til miljø og bæredygtighed, er meget fokuseret på det Sådan Envarionmental delen af det så co 2 aftryk og så videre, og hvordan det så har påvirkning i forhold til brugeroprettelsen af de bygninger vi Så får lavet. Og i den forbindelse har vi så kontaktet forskellige børnehaver, Der er blandt jer, og Jeg vil gerne høre og få et lidt bedre indblik i hvordan hverdagen er. Primært, og så har vi haft fat i karolinelund, der jo har den her.

<u>Madalina</u>

Ja, Det var lige mine tanker. Karolinelunden ville var et eksempel, og Det var faktisk Øster allé, også fordi den er nybygget åbnet i marts også.

<u>Britt</u>

Okay ja så ja.

<u>Madalina</u>

Der har det også været nogle tanker derhen. Jeg ved ikke mere Sådan helt konkret. Men. Men hvis i så vil vide mere om bygningen. Af en ny institution, hvordan de bliver opbygget og var Sådan nogle kriterier, Der er nu om dage. Så er det oplagt. Kunne det være, er det jo oplagt at finde er der, fordi den her den er jo 16 år gammel.

<u>Britt</u>

Bornholmsgade first interview With Madalina, pedagogical leader

Ja og Det er er gammel I daginstitutionsbranchen.

Madalina

Det er det nemlig det. Det er jo noget slitage på det, så jeg tænker Karolinelunden kører besvarer, fordi de er jo miljøvenlige. Der er jo meget bæredygtighed i deres konstruktion også derhenne.

Britt

Lige præcis. Så det tror jeg. vi vil gerne starte med at høre om hverdagen. Nu har vi hørt lidt, imens Vi har gået rundt herude, men Sådan. Børnene kommer ind og siger du, at de har fritid til at starte med, og så begynder der ellers nogle læreplaner.

Madalina

Ja, der er læringsgrupper eller venskabsgrupper. Der har vi jo differentieret vi jo, så vi blander børnegrupperne, men børnene de har lov til at selv bestemme, fra når de møder ind. De spiser formiddagsmad fra 8.30 til 9 cirka, så får de lov til at lege, fordi Vi har stadigvæk nogen børn, der ikke har mødt ind endnu og så omkring 9.30 der holder vi samling og så derefter bliver de delt i grupper, hvor Det er lærergrupper ud fra det tema Vi har fokus på, og derefter spiser de frokost. Kommer ud på legepladsen indtil 1.30 kommer ind og spiser igen, og så får de så selv lov til at bestemme hvor. Hvilke rum de vil lege med og sammen med dem.

Britt

Og så sætter i nogle aktiviteter op i de forskellige rum, eller...?

Madalina

Ja, det gør vi afhængige af hvad for nogle vælger halvdelen af børnene og vil være på værksted. Jamen så er det der Vi er og så tager vi den derfra.

<u>Britt</u>

Hvis du kunne prøve at snakke lidt om hvilke aktiviteter i Sådan sætter op og bruger.

Madalina

Nu er det jo primært ældste gruppen Jeg har med at gøre, så Det er skoleparat. Det er skoleopgaver, Det er, Vi har rigtig meget fokus på sproget her i Vores institution, i det. Vi har så mange tosprogede børn, så Der er sprogarbejde for det meste i løbet af dagen. Men i mindre grupper kan børnene lære bedre og specielt af hinanden, hvor Der er ro, og Der er lukket dør. Men Vi har meget fokus på sproget. Her i forhold til, og Vi har rigtig mange sprogspasser. Med forskellige temaer.

Britt

Nu siger du små grupper hvor mange er hvad Er den lille Gruppe.

Madalina

Altså hvis Det er sproggruppe, så er det omkring 6 børn, og hvis Det er læringsgrupper så er de mellem 8 of 10 børn. Ud af de 35 Jeg har her.

Britt

Og så er det med en pædagog til eller..

<u>Madalina</u>

Jа

<u>Britt</u>

Ja, det bringer mig lidt over på normering, hvordan den ser ud her eller sådan generelt.

Madalina

Altså i vuggestuen. Der er der 2 fuldtids pædagoger og en pædagogmedhjælper i børnehaven. Der har vi jo 3 pædagoger. Vi har 4 sociale normeringer her i huset. I takt af de børn Vi har der kan have nogle udfordringer, så Vi har fået tildelt 4 fuldtids nej 3 fuldtids og en på 30 timers sociale nomeringer oveni den normering vi har.

Britt

Men til hver af de grupper, vi så har været rundt og se nu.

Madalina

Vi har en social normering i hver gruppe.

Så børnehaven har som regel 2 pædagoger og en pædagogmedhjælper. Og så har de en social mening ordentligt.

Rritt

Okay. Hvor mange børn? Cirka?

Madalina

Omkring 22-23 kommer vi op på?

Brit:

Okay

Madalina

Om sommeren falder børnetallet ned, fordi vi sender børnene i skole. Og så starter vi forfra.

Britt

Og så kører det sådan op og ned.

Madalina

Ja det gør det.

Britt

Ja så hvilke nu har vi været rundt og kigge lidt, og Det er meget. Det er ud til at være meget. Forholdsvis små rum, hvis jeg i hvert fald hvad jeg havde regnet med.

Madalina

Ja Det er det. Den er ikke... og vi beregner alle kvadratmeterne med, gangene bliver taget i brug, når Vi skal lave små grupper ud af arealet, bliver taget i brug og det hele. Det er ikke de kvadratmeter. Det er også derfor de 11 vuggestuebørn er inde for sig selv. Så passede de kvadratmeter til dem og de ældste de havde i børnehaven delen, fordi Der er indregnet. Vi så ud af, at reglen også eller nej, Det er der ikke, men de omstændigheder Vi har at gøre godt med.

Britt

Men fungerer det okay at bruge garderobe eller gangarealet Sådan.

Madalina

Ja, når børnene er mødt ind og Der er ro på, ja så kan vi godt gør det.

Madalina

Og lave stille og rolige aktiviteter ude afbrudelser derhenne. Så selvfølgelig er det jo bedst i et rum, Der er lukket og så videre. Men men vi bliver nødt til at gøre godt med det, Vi har. Og det fungerer fint. Det er selvfølgelig lidt mere udfordrende at bruge udenomsarealet om vinteren fordi børnene har jo ikke to flyverdragter med, så vi kan jo ikke tage dem ud både formiddag og eftermiddag. Men vi kan jo godt tage dem og gå en tur med den for eksempel og på en legeplads og tilbage, hvor de ikke bliver så beskidt og så våde, så de ikke kan bruge flyverdragten igen til middag.

<u>Britt</u>

Ja, fordi varme rum eller tørre skabe og Sådan noget Det har man ikke mere vel?

Madalina

Ja, nej, Det har vi haft, men det har vi ikke. Nej.

Britt

Så hvis du skulle prøve at sige hvilke funktioner, der skal være eller faciliteter man skal have en børnehave Sådan hvis man skulle gå helt ned til det helt grundlæggende.

Madalina

Altså toiletterne og pusleplads og så

videre?

Britt

ja, men også hvilke rum der Sådan ligesom er og er vigtige at man har.

Madalina

Jamen det. Det er jo vigtigt at have en stue og hvis ikke 2 i forhold til. Altså, jo flere rum du har til rådighed og nemmere er det at. Opdele børnene i. Det herhenne har børnehaven for eksempel 2 rum, og så bruger vi udnytter vi gangen, hvor vi også har en spisegruppe derhenne. Netop for at børnene de også kan jeg få ro fordi at have 15 børn på en stue er ikke lige det nemmeste, og heller ikke for dem i forhold til støj og så videre. Det er stadigvæk små børn Vi har med at gøre. Herude ved os er det noget andet, fordi Der er jo noget noget større rum til det og højt op til loftet og så videre. Men det optimale Det er at Der er 2 eller 3 rum afhængigt af hvor store institution Det er. Det er det, vi vil sagtens kunne ønske os noget større rum.

Britt

Det vil man jo altid gerne.

Madalina

Det var svært. og Det er derfor, jeg siger, vi. Vi indberegner alle kvadratmeter vi har og bruger det. Vi tager også børn herop i mødelokalerne og laver gruppearbejde. Læringsgrupper heroppe for at udnytte det.

<u>Britt</u>

Så det, Der er vigtigst i forhold til at opdele dem. Det er egentlig støjen, at man kan få den fra hinanden.

Madalina

Det er jo støj, men man lærer jo også bedst af at man, for det første har nogen at lære af grupperne, og at der ikke er så mange. At de ikke bliver så distraherede af, at der kommer en rullevogn, og der kommer en og banker på, telefonen der ringer og så videre i det, men bliver distraheret af det, så så Det er det jo. Det er det jo mest optimale at Være i mindre grupper.

<u>Britt</u>

så i forhold ja, så man bliver afskærmet for forstyrrelser i forhold til det visuelle og det lydmæssige.

Madalina

Begge dele. begge dele.

<u>Brit</u>

Fordi Det er noget af det, som man kunne sige, var, at man havde et lidt større rum eller større stue, for eksempel, hvor man så havde nogle gardiner, det er jo... så tager de jo selvfølgelig ikke så meget støj.

<u>Madalina</u>

Nej nej, Det er jo opdeling. Jeg tænker lige meget hvor mange rum man har, altså hvis man har til at kunne lave noget mindre grupper er jo det mest optimale.

<u>Britt</u> Okay

Madalina

Det er også i forhold til Det er også det skolen, der gør i forhold til klasseledelse, at de opdeler den, og så bruger de gangene og de bruger musiklokaler og hvad ved jeg til gruppearbejde også for at man bedre kan koncentrere sig end at stå i et større miljø.

Rritt

Der også sket meget, siden man selv har gået i folkeskole.

Madalina

Ja men det det gør de nu Der er simpelthen bænke og borde på alle gangene på skolen og alle lokaler bliver brugt, og det gør vi også her. Alt bliver inddraget.

Britt

De større børn her, er de også ovre på skolen en gang imellem, når det er ved at være tid eller samarbejder..?

Madalina

Ja, Vi har 2 besøgsdage på skolen hvor vi opdeler dem, så vi tager dem i grupper også og og så bliver vi inviteret til en uges projekt derovre, hvor Vi er der hver dag. Sammen med dem og så til ferniseringen om fredagen. Hvor forældrene også bliver inviteret. Så inden de starter derhenne der ved de hvor det er henne, så skal de så starte 1. August i Dussen for at de bliver vænnet til det før de starter i skole midt i august. Så meget.

Britt

Sådan noget som gymnastiksale og Sådan noget er det noget i har adgang til derovre også.

<u>Madalina</u>

Det har vi haft her i tiden, men Det er jo bare, Det er udfordrende i tiden, fordi for så kunne de jo melde ud, at den dag for Det var det klokkeslæt. Der er ikke nogen, der har timer derhenne. Nu er det Sådan, at Det er bare brugt, fordi Der er så meget fokus på motorik. Så så der har vi desværre ikke adgang til mere. men Vi har adgang til deres legeplads. Vi har en legeplads lige hen på den anden side af vejen. Der er simpelthen så mange fantastiske legepladser, hvor man sagtens kan gå med en gruppe af børn for den her har

både trampolin og en lukket fodboldbane og Sådan noget. Alt det vi kunne ønske os, og at Det var her. Men Det er ikke sikkerhedsmæssigt muligt for os at gøre det.

Britt

Nej. OK. Så hvad har i så af aktivitetsrum indenfor til Sådan det lidt højere aktivitet?

Madalina

Det har vi ikke. Vi har simpelthen lukket dem ned og så bruger udenoms arealerne, fordi børnene kommer helt højt op i arousel. Og så var det faktisk rigtig rigtig svært at få den ned igen. Vi har haft et puderum før i tiden, men valgte at nedlægge den og laver den til almindelige stue, hvor børnene kan kan lege. Så har vi så til gengæld fået dem lille rum derinde med bolden, som giver rigtig god mening. Men der når de jo slet ikke at komme så højt op i arousel for det er noget andet når Vi er udenfor, så kan de bare gøre det de har lyst til. Men Der er højt til loftet, som de så skriger, så er der ikke nogen der får ondt i ørerne i det, så så vi har simpelthen vælter nedlægge det.

Britt

Det leder måske lidt over til. Hvilke funktioner der måske..l tænker, at i godt kunne have gavn af. Altså om der er nogle specielle rum eller Indretning?

Madalina

Vi har fået lov til at gøre det lyser, som vi synes Det er bedst, så min alrum ser ud Sådan her nu. Det gør den ikke efter 1. August efter 1. August så kigger vi på vagt kompetencer har børn hvad har de brug for støtte indtil og så videre så rummene kan se ud Sådan her og nu og 1. august så laver vi den helt om ud fra det det børnegruppe vi får vi får sendt 25 børn et sted, så Vi har en håndfuld, der bliver tilbage herovre sammen med det de børn Vi har 3 grupper, så Vi skal forme dem efter dem.

Britt

Ja okay, så indretningen skifter forholdsvist meget i.

Madalina

Det, det gør den læringsmiljøet det skifter fuldstændig i løbet af et år, og vi justerer os i forhold til, hvad børnene har kompetencer, og hvad Det har behov for at lære og hvad det er vi skal øve med dem og så videre, så der har vi rigtig meget fokus på det læringsmiljø ind i de forskellige rum er. Så Jeg vil ikke mene, vi mangler noget som Sådan. Jo, jeg kunne da godt mangle gymnastiksalen. Jeg ville være fantastisk, hvis Det var muligt at låne

det. Ingen tvivl om det, men Jeg kan ikke have en gymnastiksal herinde til de aktiviteter.

<u>Britt</u>

Nej nej.

Madalina

I forhold til det. Så gymnastik og sådan noget kan vi sagtens lave en udenfor. Ja når. Når vi tænker, at der er. Behov for.

Britt

Samarbejder i med andre børnehaver eller daginstitutioner og har noget.

Madalina

Ja. Vi samarbejder med alle dem, Vi er i det her, det. Det gør vi, og Vi har samarbejdet også med alle de skoler, Der er her. Jeg har jo ikke kun børn, der går på sønderbroskolen. Vi har børn, der går på Santa Maria og på Skipper Klement, og hvad ved jeg på de private, Der er børn, der mod Vejgaard og så videre, altså vi samarbejder jo med hele nærområdet.

Britt

Yes så har vi lidt spørgsmål i forhold til Sådan. Materialer og Sådan, og det lyder også lidt over i Sådan de her lovgivningsmæssige ting, Der er i forhold til renlighed og hygiejne og Sådan. Og man ser jo tit, at mange daginstitutioner har gips, eller i hvert fald malet vægge meget hvide meget kliniske. Nu er det et trægulv her, men ofte også linoleumsgulv og troldtekt i loftet.

<u>Madalina</u>

Ja, Det mener jeg også vi har, da det jo også er støj dæmpende.

Britt

Ja det synes jeg også at jeg lagde mærke til. Har i oplevet, at Der er nogen materialer der eller farver eller Sådan der virker. Anderledes over for børnene, så deres måde at befærde sig på.

Madalina

Nej, Vi har jo væggen der jo kan være lige så vide nu, men nu er vi i gang med fastelavns temaer. Så er de jo hvide i perioder men der går så 5 dage før de bliver fyldt op med at blive kreative ting børnene har og specielt med de tosprogede børn Vi har med at gøre i det her institution. Det er meget vigtigt og det visuelle følge med og de kreative processer følge med, så de bearbejder det sprog igennem de kreative processer og de ved Nårh ja, Det er en kylling, Jeg har lavet her, og der var kylling, og Det var lige da han og de kan gå tilbage og se Det er mig, der har lavet kylling, deer henne sammen med dem, så der vil altid være, men farven decideret, selvfølgelig lysner det, når Det er den hvide og de bliver slidte i perioder. Der er ingen tvivl om det.

Britt

men i har ikke haft sådan en væg, der har været farvet i en eller anden speciel farve.

Madalina

Jo, Det har vi. Jeg tror jeg mener Vi har i øst. Der har de jo Sådan en grim farve de havde valgt, fordi vi havde en vandskade. De har ikke været. Selvfølgelig har de været hvide fra starten af, men hvis vi så siger, at vi vil have lyserød, jamen så værsgo. Men altså Der er ikke nogen begrænsninger på det. Men selvfølgelig giver det mere lys. Ja, Vi har nogle rigtig godt lys i det her institution, men hvis vi så synes Vi skal male væggen, så gør vi det. Der er ikke. Der er ikke noget begrænsninger.

Britt

I har heller ikke oplevet at de gange hvor i så har malet..

Madalina

Det har de ved ikke om du har lagt mærke til Det.

Britt

Nej ikke lige umiddelbart.

Madalina

Det har de Jo i nogle af afdelingerne der Havde de lavet en ballon og. og mickey mouse på væggene også, og så videre.

Britt

Ja og det virker ikke som altså Sådan ekstra forstyrrende.

Madalina

Nej altså her. Jo mere Vi har på væggen. Jo nemmere er alt for børnene og kunne gå hen og pege og sige, nå men Det er det jeg mener, og deres sprog kan blive understøttet. Det visuelle piktogrammer og billeder og så videre, så der der skal det være alt det tilgængelige for dem. Det kan godt være de gerne lades ude i hasseris, for eksempel hvor de kun har rent danske børn, men her skal det visuelle understøtte sproget.

<u>Britt</u>

Det er nemlig blandt andet noget af det, som Vi har har læst lidt i nogle af pædagogbøgerne, at man skal passe på med. HOSTER. Undskyld og putte for meget på. Altså fordi jeg også kan være den her forstyrrende element, men det siger du så at at at hvis det i hvert fald når Det er noget de selv har lavet og at de Sådan kan relatere til

Madalina

Ja ja, Det er det altså Vi har jo ikke billedet bare for at have dem på væggen. Vi har jo billedet, fordi Vi har en tanke om, at Det er børnene.. Vi har en afdeling, hvor Der er en hund og en kat, og Det er fordi rigtig mange børn taler om deres kæledyr, og så er det nemmere at sige jamen Det er den der kæledyr hjemme ved mig, end at den ikke er der Vi har jo ikke noget der bare er til pynt. Det er noget, Der er pædagogisk tanker og overvejelser bag. Men, men det varierer rigtig meget, hvor meget Der er på væggen og ud fra hvilke temaer vi har. Altså billeder af børnene er der altid, men det skifter altså lige så meget i vil opleve, at væggen er fyldt i dag. På mandag. Der er det tomt det hele fordi der er alle festerne over, og så starter vi et påske tema.

<u>Britt</u>

Og så startede man forfra.

Madalina

Så kom i mandag, så ville i tænke. "Nej de har ikke særlig meget her." Men kommer i nu, så er. Der fastelavn over det hele.

Britt

En ting jeg lagde mærke til hernede, som umiddelbart er noget af det, der i hvert fald har skrevet i, at den nye børnehave, Vi er ved at kigge på her, at den skal have. Det er en opdelt garderobe både fin og grov garderobe.

Madalina

Ja, Det vil vi også have ønsket os.

<u>Britt</u>

Vi er enige om det, i har hernede. Det er det, man vil kalde en umiddelbart en grov garderobe nu.

Madalina

Nej. Det er en almindelig garderobe. Det er der hvor.. hvor du har den inden du kommer ind, og der kan du hænge dit tøj, og der kan det også tørre. Løvbakken har den og jeg ved ikke om i. Har kigget ind i Sundby. De har en og den er opvarmet, så der kan tøjet stå. Du skruer den op. Dagen efter kan du hente en flyverdragt og støvler, og så er det hele tørt. Men Det er den mulighed. Har vi desværre ikke, så bliver de plader våde så skal forældrene tage dem med i hjem og tørre, Ellers så kommer man ind hvor der bare er helt fugtigt. Så nej, Det har vi ikke. Men jo, det vil være det mest optimale.

Britt

Okay, men når i så har været ude i noget dårligt vejr og så kommer ind igen, hænger i så alt det våde, i de garderober i har?

Madalina

Ja. Det gør de og er de plask hvad så kommer de direkte i sække og hjem? Ja fordi Det kan ikke nå.. altså det der kan nå at tørre over natten lader vi stå, fordi Der er jo gulvvarme i hele institutionen, og Vi har også radiatorer. Vi kan putte nogle handsker på, som vi gør på, så så det, vi vurderer, at Der kan tørre til dagen efter lader vi, og hvis, vi vurderer, det ikke kan, så skal de have det med hjem og komme dagen efter.

Britt

Så har vi ja, Jeg tror, Vi er ved at være lidt omkring, men Vi har et lille spørgsmål i forhold, eller Det er måske ikke så lille i forhold til hvad? Hvad forskellen og hvilke fordele i ser ved at i integreret i forhold til at være en Ikke integreret.

Madalina

Det var blandt andet det med, at børnene, når for det første kan de rykke i grupperne ud fra deres udviklingstrin. Det er mulighed har man jo ikke en vuggestue, bliver der, indtil du er 3. Her har man mulighed for, at hvis man er kompetent barn til at rykke næste gruppe og faktisk få flere kompetencer af at være sammen Med dem, Der er ældre. Det er jo ikke samme mulighed man har, når man er i vuggestue og børnehave. Børnene ikke også får relationer på tværs af grupperne, så hvis. Der er nogen. Der har relation til gruppen, så henter vi jo børnene. Så laver de nogle legegrupper sammen. Det er jo ikke Sådan, at nu er du i den afdeling, så er der du hører til, og Det er jo indkøringen af. Forældrene skal ikke indkøre flere gange men de indkøre en gang i vuggestuen, og så sørger vi resten af indkøringen i huset. Men Der er mange overgange, og de årgange kan både være godt og skidt for børn generelt, at nogle institutioner er det vuggestuepædagog, der følte jeg hele vejen til skole. Jeg vil mene, at Det er sundt at skifte og få nye relationer, for Det er også det, vi med vi møder i skolen, men vi vil møde forskellige lærere. Ja, det skal man jo også kunne øve at det ikke er den, man er trykkest ved man kan være sammen med. Børnene bliver påvirket, af at der kommer en vikar og så videre. Ingen tvivl om det. Det gør de det, skal vi være opmærksomme på, men der hvor Det er sværest for børn, Det er i overgangene generelt. Det er, når Vi skal gå fra det ene til det andet.

Britt

og der letter det at de Sådan... at det ikke er en helt fjern.. Det er en helt ny

bygning, men det er i et nyt område.

Madalina

Nej Det er det ikke, og som regel kommer de på prøve. Specielt vuggestuebørn de kommer i en halv time om eftermiddagen, så kommer de en formiddag, så de skal jo vænne sig lige så stille. Nogle gange kommer pædagogerne ind i stuerne og er for at skabe den tryghed.

Madalina

Et så så Jeg er fortæller klart, fortæller for daginstitutioner i forhold til de årgange og i forhold til, at man ved man er her fra vuggestue til man skal i skole. Det er trygt, selvom man skal på legepladsen hver sammen med så mange andre børn, der leger de stadigvæk ind i deres grupper og har de relationer udover dem, så går de jo og leger i dem. Jeg kan ikke udtale mig så meget om det andet, fordi Det er jeg jo ikke en del af. Det er det vi sætter stor pris på og anbefaler, at man skal kigge ind i. Men tænker man, at når man kommer ud fra Det er i vuggestue, Jeg vil være i. Jamen, så er det det man skal gøre. Men der skal man være opmærksom på de årgange, der kan komme der.

Britt

ja, i forhold til personalet. Er det så de nu snakker du om, at det giver tryghed, at Det er den samme person i en til en vis grad, Der er pædagog i ens gruppe, de små eller de afdelinger i, så har det så de samme pædagoger, Der er mere eller mindre. Altså man bliver tilknyttet en gruppe.

Madalina

Ja ja der er en gruppe nord, en gruppe øst, en gruppe syd. Det har de jo fælles for eksempel om morgenen. Fra vi åbner fra 6:30 til 7:30 i nord for hele institutionen 7:30 møder der pædagoger og pædagogmedhjælpere fra alle afdelinger, så vi trækker i grupperne. og i grupperne der er de jo sammen børnehave og Vuggestue fra 7:30 til 8, lidt over 8, så der er de også integreret der, så de lærer også hinanden, og det samme er det om eftermiddagen, og der tynder ud i både vuggestue, børnehave. Der er de jo så sammen, så Det er afdelings mæssigt at at de kender det personale, og vi gør så rigtig meget ud, når børnene kommer ud til os Jo i august at Vi skal have relationer til dem også. Så de ikke kommer helt på bar bund når de kommer ud til os men Det er jo også Der er ansvarlige for Det er en relationsdannelse og det relationsarbejde i det.

Britt

Hvis du skulle sætte et tidsinterval på, hvor i som oftest Sådan til hverdag er fuldt booket eller man kan sige, at alle børn er kommet ind til, at de første begynder at tage hjem.

Madalina

Jeg vil da mene 9:30 og de første, der bliver hentet omkring 2.30.

Britt

Okay. Og så er det ellers fra 2:30 til hvad? Hvornår regner i med at lukke?

Madalina

Vi lukker 4.45 fra mandag til torsdag og klokken 4 fredag. Ja.

Britt

Og så begynder vi stille og roligt igen ligesom i deler jer ud i løbet af morgenen...

Madalina

og det samme om eftermiddagen at de kommer også i forskellige grupper ud fra en interesse. Det er, at vi deler os ud, og vi lukker rummet, Sådan som pædagogerne tager hjem. pædagogmedhjælperne tager hjem så lukker vi de rum. Ja, ved os er det noget andet for der kan børnene jo godt lege alene, og de elsker også at være alene bagved en lukker dør. Så nu har vi ro uden forstyrrelser uden at tænke på, jamen når Der er personale tilstede, så kigger de, må jeg det eller må jeg ikke det? Det er noget andet, når når de kan lege selv, så så bliver legen ikke afbrudt på samme måde, fordi vi kan både gå og gøre gavn, og Det er fri leg, men vi kan også ødelægge deres leg, fordi vi kan være i tvivl om må de udvikle legen den her vej, men Det er vigtigt at de gør det.

Britt

Jeg lagde mig til, at mange af jeres døre ind til stuerne havde sådan et lille vindue.

Madalina

Ja Det har de i vuggestuen og i børnehaven.

Britt

ja og er det får at man så kan kigge ud og holde lidt øje. Altså ja, børnene selvfølgelig.

Madalina

Ja, Det er det, og de har faktisk også på den anden side der Der er de på samme måde ud til vejen og ud til afdeling. Der har din mors lave og Det er simpelthen for imødekommer børnene kan kigge ud og så videre. Det er det. De kunne jo godt have sat en op for os også især i de der branddør. Ja når, så vi åbner døren, så kan risikere at vælte en på den anden side. Men ja, Det er i forhold til børnene det. Det er det, Der

er tænkt i sin tid.

Britt

Og de bruger dem også, så?

Madalina

Ja det gør de. De kan genkende os på på benene. Ja, de lægger altid mærke til detaljen I forhold til det. Det gør børnene.

Victor

I forhold til rumhøjder er det så noget, i bruger i forhold til aktivitetsniveau. Altså nu så jeg at der er dobbelthøjt herude, hvor der sker en masse.

Madalina

Ja Det er det jo, men Der er også en ulempe med den støjniveauet kan komme helt op i. Det er jo ikke samme mulighed i afdelingerne, Det er Det er jo mere lav arousal vi holder dem på. Jo nemmere er det for alle at begå sig i det også for de børn, der har en tilbøjelighed til sensitivitet i forhold til støj i stedet i forhold til at der kan ske så meget. Der er det, men jo her kan vi noget andet. Ingen tvivl om det. Det er svært at hænge noget op i loftet Ikke have noget fra kalenderen og Sådan noget.

Britt

Apropos sensitive børn når man optager sit barn, eller sigesøger om at få en plads her, bliver man så. Altså er der nogle grupper, der bliver. Der er for mere sensitive. Altså bliver man delt op Sådan eller er det der hvor Der er plads?

Madalina

Nej, men der er fuldt integreret. Hvis man har en relation til en gruppe, så vil jeg gerne prioritere det. Hvis man siger min bedste ven går der, er det muligt for mine børn. Jeg er. Så prioriterer det trods børne tal og så videre, og hvis de siger at de har en ven i vuggestuen, og hvor de har en rigtig god relation, ja igen prioritering det det prøver jeg rigtig meget i forhold til det. Men nu står vi jo til at de lukker ressourcer pladserne, så Vi skal jo have børn, der har diagnoser ind i børnehaven og så videre, og der vil det også være bedst muligt at uddele det og udligne det så meget som muligt, så der kan være plads for alle, men også lige så meget for at børnene kan lære af hinanden, at at Det er den ene har kompetence kan smitte af på den anden og så videre, og de lærer bedst af hinanden. Det kan godt være, vi sætter dagsordenen for, hvad Vi skal lave, men børn. Lærer bedst at spejle sig i hinanden. Prøve at øve sig sammen? men jo Vi har børnene udfordring.

Britt

Det tror vi Sådan rimelig godt omkring nu. Så ville vi høre om Sådan til fremtiden er det her projekt om, om vi kunne få en mailadresse, eventuelt hvor vi kunne kontakte jer i forhold til at have, når vi kommer med noget lidt mere konkret daginstitution design at vi så kunne komme og høre, hvad i tænker området umiddelbart?

Madalina

Ja det kan i sagtens.

Victor

Hvis du nu skulle lave din optimale børnehave vuggestue.

Rritt

Ja vuggestue børnehave daginstitution integreret.

Victor

Ja, hvordan skulle det så se ud? Det er et svært spørgsmål, men altså.

Madalina

Jamen der skal jo være den grov garderober ingen tvivl om det, og der skal være flere toilettet, for eksempel de børn Vi har. De kan stå i kø til at kunne komme på toilettet. Der skal også være flere puslepladser både til børnehave og vuggestue. Det kan godt være, at man tænker nå, men børnene de kommer af med benene, inden de kommer i børnehaven. Det gør de faktisk ikke den dag i dag. Vi kan risikere. Nogle gange har de her blev på indtil de er 4. Børnehaveafdeling så så det ville være en del af det og jo flere rum jo bedre. Det vil Jeg mene. Vi har jo gjort det for nogle år tilbage og vi har lavet døre, det tror jeg ikke. De har haft mulighed for at lægge mærke i mellem afdelingerne. Alle de afdelinger dernede, Der er din dør imellem. Det var der ikke. Før var det et rum her et rum her i rum her nu er det simpelthen dør du kan gå rundt om, og Det er det her med, at så kan vi åbne op så kan vi være sammen alle sammen, og så kan vi lukke ned og være fleksible rum. Det er lige præcist på den anden side, Der er det personale stuen. Ja, jo mere fleksible...

<u>Victor</u>

Så fleksible rum lavet Sådan at der er skyde væg.

Madalina

...Jo nemmere er det og på din egen præg på ja hvad ville jeg så er det så drama Jeg vil lave nu i eller er det købmænd Jeg vil lave den i fordi læringsmiljøer kan du hurtigt ændre hvis du har det lukkede rum kontra hvis Det er stort rum så bliver det jo svært for så leger drengene biler Og så er der nogen der vælter magneter her og så videre, så så Det er det jo ellers så tænker jeg ikke. Altså Vi er

jo rigtig glade for at have madordning her. Det betyder rigtig meget, specielt fordi Vi har jo forældre, der har ressourcestærke, og så har vi jo nogle familier der ressourcesvaa der ikke har samme kompetence. Men her har vi jo lige fordi vi spiser det samme kontra her i en madpakke derhenne der siger spar 5. Og så er man inde her og måske ikke kun mere rugbrød ikke hvis den overhovedet er med, for Det har man jo også oplevet at. Det er ikke altid man får det madpakke med. Ikke altså det Det er guld værd synes jeg, og så ved jeg godt at der altid snak om hvad det egentlig er. Jeg ved at her bliver der lavet rigtig sundt mad varieret med også når forældrene. Det er jo ikke alle der har mulighed for at lave varm aftensmad, så så har de spist her, så kan man sagtens få en rugbrød når man kommer hjem og bare nyde tiden med sit barn kontra og lave 3 retters mad. Fordi der skal også være faciliteter til mødelokaler. Vi har jo rigtig mange møder. I den her. Institution i forhold til, at Vi har børn i særlige position. Vi har rigtig mange af dem her hos os.

Britt

Er det så interne møder eller er det med forældre, eller?

Madalina

Deres forældre, og Det er med samarbejdspartnere. Det er simpelthen med forældre til forældresamarbejde. At man har mulighed for at komme op og og have et møde. Det er jo i forhold til nogle af de mere tavlen her. Vores model. For møder, når vi taler med forældre derude fra det her. Det hedder SOS modellen, hvor vi taler om. Hvad har vi af mål og drømme. Først boede forældrene og os. Så går vi over til hvad fungerer. Hvad er barnets kompetence i det? Hvad? Hvad kan vi se, at barnet kan i forhold til alderen, og hvad kan forældrene se? Så går vi ud på, hvad skal vi så lære. Og hvad skal børnene øve her? Og til sidst? Så skriver vi så, hvad skal vi hjælpe med i situationen.

The meeting was interrupted by a phone call and ended.

Stjernen first interview With Lars, pedagogical leader

Lars

Og nu i comfort altså udover universitetet.

Britt

Vi kommer ind på create og er i gang med at sætte ja altså.

Lars

Det var det, Det var. Det er sjovt nok, og Det er. I morgen Jeg har. Nogen fundet nå? Det er jeg blandt jer sammen.

Britt

Altså det. Det er jo også universitetet egentlig. Og ja, Vi er ved at uddanne os til design ingeniører, tror jeg vi kalder os Sådan en arkitekter. Ja.

Lars

Det er altid godt at vide. Hvad det bliver til? En gang.

Britt

Ja. og Vi er i gang med Vores speciale, hvor at vi vil lave en bæredygtig daginstitution, hvor Vi har fokus på, hvordan de her nye krav, der bliver sat til nye daginstitutioner i forhold til bæredygtighed. Det er ligesom påvirker specielt den sociale bæredygtighed, og hvordan brugerne ligesom hvordan virker rummene i forhold til børnene? Så det, Vi er ude at gøre nu her? Vi har været ude og snakke med bornholmsgade, daginstitution. Så er vi her i dag og. Så skal vi. Forbi Karolinelund også.

Lars

Så Det er med ved Jane hun er ude i karolinelund. Det er en gammel kollega i mange år.

<u>Britt</u>

Ja lige præcis. Og det vi egentlig undersøger på nuværende tidspunkt, er mest Sådan at høre om. Vi vil gerne høre lidt om, hvordan hverdagen er og hvilke aktiviteter der bliver lavet i løbet af dagene og og hvis muligt hvilke? Virkemidler man kan bruge eller i bruger i forhold til at styre børnene, fordi Sådan nogle kan jo være nogle livlige nogle. Jeg tror Det er umiddelbart Sådan lidt Vores intro. Ja, så hvis vi starter med hverdagen nu er det børnehave i har her har i noget samarbejde med nogle specielle vuggestuer, når de nu ikke er integreret?

<u>Lars</u>

Jeps jeps. Nej, men Vi er jo en del af et dagtilbud og i Vores dagtilbud Der er Det er 12 institutioner nu, og Jeg er egentlig også. Jeg er også pædagogisk leder i vuggestuen annebergvej, som lige. Lige et kvarter den vej på, og så ligger der nogle forskellige vuggestuer omkring Vores dagtilbud, og der har man jo ikke der har man ligesom et kan man sige et samarbejde, fordi vi kender hinanden så forældre. Spørger tit, hvad for nogle børnehaver og hvad. Vi vil jo gerne det samme. Alle institutioner, vi gør det måske på forskellige måder, så Det er ligesom indgangsvinklen. Og så er der rigtig mange dagplejere. I det område her så så Vi har aldrig Sådan helt. Vi har ikke et problem med at få børn. De kommer lidt af sig selv. Skal jeg til at sige, fordi Vi er jo lidt gemt væk herinde. Man lægger ikke umiddelbart mærke der ligger en børnehave. Så Vi er meget afhængige af Det er et mund til mund metoden. Vi har ikke et eller andet, når i kommer ud i Karolinelunden ikke der er Byggede flot og stort I karolinelund, så Vi er afhængige af at at folk de taler om os, at vi ligesom får noget gang i butikken.

Britt

Så når det nu kun er børnehave hvad aldersgruppe snakker vi så?

Lars

Så er det 3 til 5 år før de kommer fra vuggestue. Der kommer de når de bliver 3 og så går de jo i skole nogle af 6 når de kommer i skole og nogle af 5 men så er de her indtil der.

Britt

3 til 5 år OK. Ja så hvordan ser hverdagen ud for jer? Hvornår starter den og hvornår slutter den? Og hvor meget laver i uddelt i grupper og hvor meget samlet?

Lars

Jamen altså her Der er vi altså Vi har ikke Sådan som man kender fra gammeldags, Sådan blå, gul og grøn stue. Vi har yngste, mellem og skolegruppen så på nogle tidspunkter af dagen er for sig og på andre tidspunkter af dagen, at man sammen med Sådan en hårdt skridt op. Så åbner vi jo klokken 6.30 om morgenen og der kommer de første børn. Der kommer ikke så mange der de får noget morgenmad og sådan dudeluttelut. Så omkring klokken 8, der begynder at komme. Rigtig mange børn kommer mere personalet, så har i været her. Vi er jo i flere etager, så åbner man ligesom kan man sige ovenpå og og så børn får den den kan starte på dagen. De

gerne vil så lidt over 9 der har man Sådan en samling i grupperne altså de her yngste, mellem og skolegruppen. Hvor man får noget at spise, men også for at man får præsenteret dagen. Altså hvad skal vi lave frem til klokken 11? Og det foregår både mundtligt, og Vi har Sådan nogle piktogrammer, og Der er Sådan nogle pædagogiske redskaber, man bruger, så alle børn de ligesom forstår den besked, både dem der. Som både kan tåle danskere, der kun forstår dansk, og dem Der er mest visuelle og ballet. og det gør man så gerne Sådan i de grupper her, som vi kan se nu, så var vi ovenpå her. Det var kun skolegruppen, der var lige før i kom der. Der var nogen der var på tur, fordi Det er deres dag til at komme ud. De skulle på biblioteket så omkring klokken 11, så har man ligesom en længere samling og det. Det er Sådan en aldersrelateret samling kan man sige, hvor man igen bliver samlet i den aldersgruppe man er fordi Det er selvfølgelig en treårig har brug for og selvfølgelig forskelligt fra mand 5 år har brug for at og Der er også meget Sådan hvad kan man sige Vi har en skolegruppe et år, den kan have brug for det her og så næste år så har den brug for det andet er vi Sådan meget har fokus. På det, og så skal vi have noget at spise, og Det er selvfølgelig også et udover at spise og selvfølgelig også et pædagogisk måltid at lære forskellige mad og tale om og dannelse ved bordene og hele den der række, der så ofte så over middag, så går vi udenfor og er egentlig så lang tid på legepladsen som overhovedet muligt. Der er Sådan generelt Sådan, der kan man sige. Det er også der, der afvikles pauser, selvfølgelig også der Der er færrest personale. Der er ligesom en der ligesom står for hvad kan man sige. At sætte en leg i gang, kan man sige et eller andet, og så er der en der ligesom går rundt og ligesom har tilsyn med resten af børnene der de selvfølgelig ikke ligesom skulle bare skal passe sig selv. Og så er vi en uge så lang tid som muligt. Lige den her tid lidt mindre, men ellers så er der igen noget frugt og noget 14:15 isch. Og så omkring i den tid her, som måske klokken. 14:30-15 så går man ligesom ind igen, og så er det ligesom kan man sige den del som der også er om morgenen og formiddagen, hvor man så får fordelt børnene op og nede og Sådan. Lige så snart man så kommer hen ad og der bliver mere affolket. Jamen så samler man sig igen, hvad kan man sige nedenunder det i så i

al-rummet og så er dagen cirka slut. En af det Der er der selvfølgelig tænke alle mulige tanker og Der er sproggrupper og fokusgrupper og alt muligt andet, men Det er Sådan den hårde struktur i løbet af det andet.

Britt

Og hvornår sagde du i lukkede?

Lars

Det er 16:45. Og så 16:30 om fredagen. Hvis Det er vigtigt.

Britt

Ja Det er mere Sådan for at få et et spænd over hvor hvor meget tid man egentlig bruger eller den altså bygningen bliver brugt. Den bliver ikke lejet ud til andet udenfor børnehave åbeningstid.

<u>Lars</u>

Nej, hvad kan man sige. alle legeplads Så så som er kommunale. De er også offentligt tilgængelige, så der kan sagtens komme nogen og lege nogle Vores nok ikke den mest fede legeplads at komme på, men når i nu er kommet ud i karolinelund, som har en kæmpe legeplads, som ligger midt i en park, den bliver nok brugt væsentligt mere kan man sige udenfor åbningstid og i weekenderne end Vores gør. Men men Sådan principielt så er alle legepladser de offentligt tilgængelige men inde i huset. Nej, Det er kun Vores egen. Hvad kan Man sige arrangementer, der bliver brugt til.

Britt

Hvordan ser nomeringen ud her. Har i nogle Sådan ekstra?

<u>Lars</u>

Ja nej, Vi har jo en standard normering som alle kommunale institutioner lige nu. Der har jeg en pædagogisk social normering, hedder det ved i hvad Det er?

Britt

Men Vi har hørt lidt om det.

Lars

Nå men Det er egentlig det der man man ligesom sammen tager en masse data om forældre, indkomst, om de er enlige, boligområder, hvordan? Hvad kan man sige. Mange tosprogede? Det er Sådan helt sammensurium, Der er en eller anden algoritme, og så regner den på og siger, jamen, her har vi brug for noget ekstra, og Der er så ansat nogle sociale normeringer i Aalborg Kommune, eller de er faktisk statsligt ansat de sociale normeringer. Og dem har man så et et år ad gangen normalt så siger du får en social normering, og så gør man det ligesom op hver eneste år, siger nu nu, nu er du ikke i den

kategori, hvor du får en mere og så så kører det så lige nu har jeg også en ekstra social normering, og så har vi løbende studerende. Henover et år.

Britt

Altså. De tæller ikke med i normeringen.

Lars

Nej det gør nej hvor studerende Det er det man kalder førsteårsstuderende. De følger ikke med i normeringen, men den sociale normering gør og Det er Sådan, hvad kan man sige en reel ansat og en reel pædagog Der er ansat, så så det hæver jo kan man sige normeringen, men Det er jo altid Sådan en. En midlertidig ting ja.

Britt

Hvor mange børn er i her?

Lars

Ja Vi er normeret til til 34, og Vi er 37 nu man har det man kalder Sådan en 10% vippe, så Vi skal altid tage 10% ekstra indenfor. Man kan sige den samme økonomi. Så men vi Vi er på. Vi er på Vores ekstra 10%.

Britt

Det har vi været. Ja, det tror jeg egentlig er rimelig godt, hvad Vi har. I forhold til hverdagen ikke. Jo ja, så ville vi godt snakke lidt om, hvilke faciliteter I har. Nu så vi der var et værksted og et puderum. Er der noget som? Jeg ved ikke. Har du arbejdet andre steder end her før? Nu har du jo også en vuggestue, men.

<u>Lars</u>

Altså ja, men Jeg har ja og så har jeg haft. Jeg har haft dobbeltværelse, så Jeg har. Jeg har også både været i Thomas busch og i Egeholm færgevej og før det der har jeg været på Sådan et opholdssted for unge mennesker, der er tvangsfjerne, hvis Det er vigtigt overhoved.

Britt

Er der Sådan nogle funktioner du har oplevet? Der har været andre steder, som ikke er her, der kunne være gavnende.

Lars

Altså nu har jeg jo set Vores legeplads. Den er ikke særlig stor, hvis jeg nu når jeg nu kommer ud i Karolinelund, eller hvis i var skulle ud til dagsorden kometen som har en kæmpestor legeplads med lidt skov og noget ujævn. Altså nogle bakker. Det kunne man godt savne her. Det er derfor, som jeg også er der. Vi er altid ude af huset, fordi Det er så det, så har vi selvfølgelig privilegeret, at vi ligger herinde i midtbyen og kan bruge alle de faciliteter, Der er. Men hvis jeg skulle ønske mig

noget, så var det. Jo en 5. Gange så stor legeplads, hvor man kunne indrette. Hvad kan man sige nogle læringsmiljøer, ligesom man gør indenfor og sige, jamen, det her kan vi godt tænke os Der er ujævnt, og Der er jo bakker, og man ligesom kunne tummel og. Det har jeg som i nok kan se væsentligt mere begrænset her, fordi der ikke er så mange muligheder. Så hvis der er noget jeg kan ønske mig, så er det nok det.

Britt

Men Sådan indvendigt der der fungerer det som Det er nu.

Larg

Ja det synes jeg altså. Det er jo som jeg også har set. Det er jo atypisk i 3 etager, så det bliver rigtig mange rum og Det er jo en kæmpe fordel fordi du kan gå ind og lukke døren. Du kan lave læringsrum som er afgrænse. af vægge. Så Det er en helt vildt god ting. Udfordringen ligger selvfølgelig i at jeg ikke har. Hvad kan man sige når i nu kommer ud i Karoline så kan i se Der er Sådan 2 og så har et kæmpe stort alrum midt der hvor køkkenet er Det har jeg ikke. Jeg har ikke et sted på den måde, hvor jeg ligesom bare kan samle alle børn og Det er selvfølgelig en udfordring, kan man sige på nogle tidspunkter, hvor det kunne være fedt at have et stort alrum og men omvendt så har har jeg så fordelen i at have rigtig mange små rum, så Det er Sådan lidt en en give and take situation.

Britt

Ja, så oplever du, at Der er nogen rum, der bliver brugt mere end andre.

Lars

Altså Jeg tror, at hvis børnene kunne vælge at vi skulle bygge 2 rum, så ville de have 2 puderum, selvom Vi har et Sådan er institutionens størrelse, forholdsvis store tumle rum eller puderum, så er det der børnene helt vildt gerne vil ind. Altså hvis Der er et rum jeg skulle sige det og så værksted. Jeg har et forholdsvis stort værksted, så der kan jeg faktisk godt rumme mange børn. Men altså hvis jeg kunne have 2 puderum, så tror jeg faktisk børnene ville synes at Det var fedest. Hvis Det var, hvis man spurgte dem specielt de ældre børn.

Britt

Hvis man så skulle snakke om de lidt yngre børn og Sådan lidt de 3 4 årige hvor tror du de umiddelbart eller ser i at. De er Sådan.

<u>Lars</u>

Jeg tror, når de er helt små. Altså når de lige kommer fra vuggestue. Jamen så er det så foretrækker jeg gerne du ved at sidde ved bordet og tegne måske lidt at lave, men det tror jeg lige så meget for ligesom så jeg trygt i min egen lille alverden fordi at. De er lige så interesserede i det her puderum. Det er lidt det der der trækker, og så er det jo gerne alt det kreative og så har du ligesom en. Altid en gruppe børn, der synes Det er konstruktion, altså lego og magneter og Sådan noget. Det er helt vildt spændende, hvor Vi har har noget til det. Men hvis der var altså alle elsker det puderum, så hvis der var en ting jeg ligesom skulle tage hen over, så er det det her. Hvad kan tumle rum og man kan kaste sig ud fra ribberne ligesom at se hvad de kan klatre og og fordi Det er jo det sted man kan. Det er en institution Det er jo Der er andre steder. Det virker ikke så godt at hoppe ud og. lande på det hårde gulv eller sådan andre steder.

Britt

Apropos så er tomle rum har i noget samarbejde med nogle gymnastiksale eller Sådan en større i kan bruge?

<u>Lars</u>

Ja vi Vi har samarbejde med AIG Vi er en del af noget der hedder børneliv i sund balance og igennem det der kan vi booke os ind over ved AIG, så Vi har Sådan.

Lars

Jeg på et eller andet tidspunkt jeg ikke huske, så har vi Sådan en 6 uger i træk hvor Vi har en der om ugen hvor vi alle børnene er ovre AIG. Og så er der opstillet. Hvad kan man sige motorikbane og alt muligt, så Det har vi der igennem.

Britt

Det har vi også været lidt omkring så. Den der tager vi til sidst. Ja. Så har vi lidt spørgsmål i forhold til Sådan materialer og Sådan noget, så. Om i har nogle erfaring med for eksempel, at nu kan jeg se, der var nogle malerier som på væggene, men om i har oplevet. At at det, hvordan i indretter rummet både i forhold til hvor mange møbler Der er, men også hvilke farver og Sådan i bruger, om Det har nogen indflydelse på, hvordan børnene bruger rummet.

Lars

Det er jo meget oppe i tiden at snakke om læringsrum, så ideen med med alle rum eller alle kroge Vi har i børnehaven. Det er ligesom diskuteret igennem, så de har et eller andet formål, vi gerne vil, når børn går ind i det her rum, så skal de gerne. du ved indbyde til et eller andet. Det kan man selvfølgelig gøre ved. At du ved at have de ting, men Vi har simpelthen taget billeder af ting. Det er det her, Der er i det rum. Vi

har også taget billeder af. Hvad kan du bygge så børn faktisk ud og se dem du kan bygge den her togbane eller. Så så har farver. Vi har ikke tænkt altså Det har jeg nok ikke derhen, hvor Jeg har tænkt, okay, Vi skal have flere grønne farver eller gule farver eller. Men, men ligesom når i går op ad trappen, så er der tal og bogstaver de i forskellige farver, og Det er selvfølgelig fordi man gerne vil. Hvad kan man sige, hvis det nu var Sådan en grå kedelig en man lige skulle kigge efter, så kunne det være man ikke var opmærksom. pointen Det var jo at man skulle være opmærksom på dem og så kunne gå på trappen ligesom for bogstav til bogstav. Så bruger man selvfølgelig bevidst. Hvad kan man sige farverne? Men Det er ikke Sådan jeg tænker, når jeg ikke køber kopper, så tænker jeg skal have 7 forskellige farver, så køber jeg gerne et eller andet sæt. Så på den måde har vi ikke tænkt farver ind som. Du ved, som vi vil have den her farve, men vi tænker farver ind som noget, vi gerne vil du ved, hvis vi gerne vil være opmærksom på noget, kan man sige, giver det mening? Super.

Britt

Ja Det er fordi Jeg synes jeg lagde mærke til at at det eneste rum der Sådan var farvet farvet. Det var netop puderummet og at noget af det som Vi har læst lidt i nogle pædagoger er også at farver. ofte leder enten til højere aktivitet eller er forstyrrende?

<u>Lars</u>

Ja. Og Det er jo Det er Sådan en, hvis man nu tænker, man kan godt have nogle børn, med nogle særlige behov, hvor man gerne vil nedsætte deres indtryk, så vil hvis du så har Sådan en indsats pædagogisk psykolog ud vil sige, jamen i skal fjerne nogle af alle de indtryk, så de vil gerne have, at man Sådan principiel bare til det enkelte barns behov fjernet alt fra væggene for eksempel fordi det ville være forstyrrende hele tiden at skulle møde noget. Nyt ikke, men så vil du så have, hvis du så har et pædagogisk tilsyn, så vil de jo så sige jamen i skal jo udvikle børnene. I skal jo have læring, i skal have læring på væggene, i skal have læring når de går op og ned ad trapperne. Der er nogle gode ting, så de vil jo sige der skulle være noget på væggene, så Det er altid Sådan et et at Vi skal krydse alle børns behov og hvordan gør vi det bedst muligt? Så det så ja farver det, det gør noget, men det gør også noget ved nogle andre børn, så Det er jo Sådan Det er et skisma om. At man ikke skal have en farvestrålende institution samtidig med at der skal jo være farver, men Sådan en Sådan en højere. Du ved lang diskussion om, hvordan jeg indledte

min institution med farver. Det har jeg ikke haft, så Det har jeg på den måde ikke forholdt mig til, om jeg skulle have flere grønne eller gule eller røde farver. Men jeg forholdt mig til der nogle steder, jeg gerne vil have noget farve

Britt

kan man gå så langt at sige, at indretningen ofte afspejler de temaer og ting, altså aktiviteter i laver?

Lars

Ja altså det kommer hvad du tænker på. Altså hvis hvis du tænker på, at når vi så hvis Vi har et læringsrum hvor Der er konstruktion, jamen så er det jo Legoens farve der her eller Det er de der magna-tiles eller hvad de hedder deres farver eller Det er kliks og deres farver og de er selvfølgelig bevidst købt i forskellige farver. Du kan også bare købe dem i shorts, men Det er selvfølgelig fordi at Der er også noget med farve spænd, men de som jeg siger de er ikke købt på at jeg jeg tænkte at der skulle være 17 grønne og 5 røde. de er købt fordi Der er forskellige farver.

Britt

Kan i se nu, når du netop nævner, at i har mange rum og mange forskellige størrelser af rum, at de mindre rum bliver brugt til mere, altså en type aktiviteter. Og de større rum... telefon ringer. hvor kom vi fra? jo om Der er altså om små rum indbyder til en anden type aktivitet end store rum. Har i lagt mærke til det?

Lars

Ja selvfølgelig. Hvis du har et eller andet kæmpe rum hvor Der er du ved hvor der ikke er nogle forhindringer i så indbyder det jo til at man kan sætte hastigheden op hos børn. Altså Det er vel det det, men Jeg synes at opgaven ligger i at sige jamen Det er et stort lille rum, så skal der være en ide med rummet, så børnene ved hvad ideen er og selvfølgelig. Skal, er det ikke fordi man skal Sådan tage kreativiteten for børn, fordi de bruger også nogle gange vi havde gruppen engang. Vi tænkte, det bliver Sådan et du ved, her kan vi sidde og læse lidt og Sådan noget, men de fandt så ud af Det var mega fedt at hoppe for noget og så ned på en stor hvadros og Sådan noget og så tænkte vi jamen jamen, Det er også fedt nok, så må vi hellere tænke nogle andre tanker, for Det er jo ikke de tanker vi havde, men Jeg synes ikke Sådan. Jeg synes ikke altså Det er hvad man gør det til. Det er hvad man hvad man putter i rummet og selvfølgelig store rum igen altså altså de kan jo bruges, så Det er ligesom at sige at vi ud på legepladsen. Jamen så er der flere børn der løber end de gør i et et 10

kvadratmeters rum. Selvfølgelig fordi Det er det de indbyder til, kan man sige ja.

Victor

Så det her med fleksible rum?

Lars

ja og Det er det Der er spændende. Det er jo hele tiden den der situation, hvor firkantet skål et læringsmiljø være. Skal det være så stringent, at du faktisk ikke at du du også som som pædagogisk personale hele tiden vil du ved holdt man fast i et læringsrum? Eller er det fint nok at rummet også bliver brugt til noget andet? Fordi har du så? Har du har du så været dygtig nok til at indrette dit læringsmiljø, så Det er hele tiden Sådan en. Men for mig altså altså hvis børn ikke altså går ind i et rum for at læse de finder ud af Det er meget federe at lave noget andet. Jamen så er det jo bare fedt, så har de været kreative og de har lavet noget de har brug for. Selvfølgelig skal det. Være hensigtsmæssigt, men hvis Det er så det der sker hver gang, så godt være. Vi skal omtænke Vores idé i rummet, så skulle vi måske lave rummet om til det. Børnene synes var fedt i stedet for at blive ved med at bibeholde her skal du sidde og læse en bog, hvis det Det er overhovedet ikke er sjovt, altså du ved så giver det jo ikke mening. Så Jeg synes Det er Sådan en fin balancegang, men at at have struktureret sit miljø og så give den kreativitet, der selvfølgelig også skal være til for at Det kan bruges til noget andet også.

<u>Britt</u>

Laver i. Rummene snakkede i om, at det blev tilpasset, hvilke børn Der er her.

Lars

Ja både og vi Vi har jævnligt Vores læringsmiljøer oppe, fordi vi godt have læringsmål. Det indretter vi. Det fungerer hos den her gruppe børn så over halvandet år, så skifter vi jo stort set over halvdelen af børnene. Så kan det være den næste gruppe børn, de tænker, vi fatter ikke det her rum skal bruges til, eller vi forstår ikke ideen med det, eller Det er ikke Vores interesse, så er det Vores. opgave ligesom og få ændret på det, eller gør det mere forståeligt eller så løbende der ændrer man sig på. Det er svært at ændre læringsmiljøet puderum for eksempel det her, det bliver ligesom og Vores værksted deroppe. Det bliver også lidt du ved det her saks og alt muligt er, men de andre dem laver vi om Der er specielt nogle rum vi laver om på løbene, hvor vi tænker jamen, selv det er rum ikke hvor der engang

var indgang, altså der var engang fyldt med alt muligt og så har vi bare fundet ud af at den der hvalros, den skal være derinde og så gør børnene det selv, så henter de selv ting henter ind og lukker døren eller. du ved eller kigger ud nogle gange, så har der været noget byggeri altså du ved så blev rummet bare jamen jamen det Det kan børnene bruge til at trække sig i også og så skal vi måske holde fingrene fra det og så bare sige Det er det det rum for det bliver brugt helt vildt meget, så Vi har opnået noget uden at vide det, så Jeg synes man skal ændre dem hele tiden samtidig med man skal være bevidst om, at der skal være noget finmotorisk. Der skal være noget grovmotorisk der skal være noget kreativt, der skal være noget bevægelse der skal være noget rolle leg der altså du ved så man. Så man også kommer hele vejen rundt, så så Det er Sådan en fin balancegang synes jeg igennem igennem det hele, så man man det ikke bliver for stramt, men heller ikke for løst.

Britt

Der løbende ændrer sig i løbet af ja, men er det så Sådan? Hvis man nu siger du det løbende ændrer sig er det, er det på årsbasis, det ændrer sig. Eller er det mere Sådan noget på måneden? Det er fra måned til måned det eller.

Lars

Nej Det er ikke. Det er ikke Sådan fra måned til måned, så er det mere det der ændrer sig nogle gange fra måned til måned det er jo Vores. Altså hvis du har en relationsgruppe, hvis du har her et barn, der har brug af det kniber lidt med det sociale, vi sætter dem sammen med nogen, og han har interesse for togbane. Så laver man ligesom et miljø, hvor vi når han tager den relationsbane, hvor de her togbaner, og Det er et lukket rum og Sådan noget. Så laver du ligesom et læringsmiljø læringsmiljø, men kun til ham, og så bliver ligesom pakket væk, når vi ikke har den her gruppe længere, kan man sige. Nej, vi ændrer ikke Sådan en grøft på læringsmiljøet fra måned til måned. Det er mere, når vi ser noget, ikke virker, eller når noget mister interesse eller når noget. det ikke bliver brugt til det, vi tænker, så skal vi jo tænke, jamen, så har vi ikke noget af det, vi vil. Men så længe at at rummet i bliver brugt til det, vi gerne vil, og vi kan se børnene, de udvikler sig i dem, så. Så jeg laver ikke om noget der virker. Det er i hvert fald sjældent, men men ja, Det er Vores opgave. Det er jo hele tiden at være på det, og vi havde. Hvad kan man sige Vores midtersektion på et tidspunkt for et år tilbage? Det det ændrede vi 3 gange på et halvt år, fordi det det gjorde ikke det

vi ville, og så må man jo bare ændre og prøve noget nyt at sige, jamen, der har vi sgu ikke kloge nok. Nu må vi se, om vi kan klare os lidt bedre og så blive klogere på hvad vi skal lave men når noget virker så laver jeg det om så Det kan. Det er Sådan meget. Indtil det ikke virker længere?

Britt

Oplever i, at Der er noget lovgivning, i føler er Sådan meget begrænsende for jer.

Lars

Nej Jeg synes Der er jo kommet den for et par år tilbage. Den styrkede pædagogiske læreplan og for mig og Det er der mange meninger. Men for mig er det helt vildt godt. Jeg kan godt lide, at Det er udarbejdet, ligesom man har fået et begreb ind som dannelse for eksempel. Jeg synes dannelse er utrolig vigtigt for børn, at de kan finde ud af. Hvad kan man sige gebærde sig helt almindeligt sidde ved et bord? Send gulerødderne rundt og sidde og spise og og kan gebærde sig ude i verden. Altså så man ikke sætter sig ned og skriger eller synes man skal slå på alle ruderne. Man går forbi og Sådan et dannelsesbegreb og leg at Det er fokus. Det er gennem leg børn lærer, så så for mig er det en god ting, hvis det nu havde været den anden retning man vil have gået i. Man havde Sådan 2 muligheder, hvor det blev mere Sådan. Hvad kan man sige en en skole agtigt altså du ved kan børnene lave en trillebør tjekke kan børnene når det blæser fra vest finde ud af at sætte røg ind i øst tjek så vil Jeg synes at Det var en begrænsning for mig, men Jeg synes man har fat i det helt rigtige her i forhold til daginstitutioner verden, så for mig er det en helt vildt god ting, fordi Jeg synes at Det er rigtigt. Det er selvfølgelig fordi Jeg synes Det er det rigtige at gøre, og Jeg synes ikke Det er en begrænsning. Nogen kan synes at at det vil fastsat og Der er nogle ting du skal igennem og Sådan noget, men for mig synes jeg bare det, Det er så indlysende det Vi skal lave, så Jeg synes Det er fint Det er kommet ned på et stykke papir Og Jeg synes stadigvæk, Det er så bredt, at jeg. Føler mig ikke så begrænset af det. Altså selvfølgelig skal forholde mig til dannelse. Selvfølgelig skal forholde mig til leg. Selvfølgelig skal forholde mig til læreplanstemaerne. Altså selvfølgelig skal evaluere ting, så Det er jo ikke Sådan. Jeg synes bare Det er fint. Der er kommet Sådan en form for det, men stadigvæk en form, hvor man har rigtig meget selvbestemmelse, så så på den måde og dagtilbudsloven synes jeg den er jo så bred at at at Det kan man næsten ikke brokke sig over, tænker jeg.

Britt

Har du erfaring med at have været på en integreret institution også?

Lars

Ja, Jeg har haft ledelse af midlertidige, integreret institutioner.

Britt

Hvilke fordele og ulemper kan du så se? Eller forskelle kan du se på hvordan en integreret ser ud i kontra at det her Det er en ren børnehave.

Lars

Helt klart fordelen for et hvad kan man sige for et børne og et forældreperspektiv? Det er, at Det er det samme. sted du afleverer du er tryg ved stedet. Du har i hvert fald i nogen grad, selvom tit integrerede institutioner. Jamen så er du også nogle gange om morgenen, så åbner man sammen, så du har set. Hvis du kommer i børnehave, børnehaven. Du har lige hilst på Torben eller frits eller eller sisse eller Sådan et eller andet, så du ved godt hvor Det er for børnene er det også er det tit nemmere rent pædagogisk, så har jeg de instruktioner Jeg har været svær men Sådan nu nærmer det sig de skal i børnehave, men så begynder de så småt og ved. Så har de lige med til en samling, så er de lige med ovre på legepladsen de store en periode, så er de lige med op og du ved så man ligesom du ved man har det der førskole begreb, så bliver det næsten Sådan for børneovergreb man ligesom stille og rolig og og de både personalet kan få en god relationer børnene og du ved at som man har en en helt klart større Sådan indslusningsforløb og forældrene, de kender jo de pædagoger, de kender stedet, Det er det samme sted, så deres tryghed smitter af på børnene, så de er trygge så tit børnene. Også bliver trykt. Og Det er helt klart. Det har en fordel, at man er en integreret institution i forhold til børnene og deres overgang og og kendskab til personalet og alle de her ting her.

Britt

Så der bliver en lidt mere flydende overgang der. Ja.

Lars

Ja ja helt sikkert. Man har i hvert fald mulighed, for jeg ved også Der er nogen. De har det stadigvæk som om Der er et hegn imellem de 2, men der var jeg været i hvert fald. Der har de ideen. Det er at man får den her stille og roligt og man kan også hjælpe hinanden i højere grad der kan. Det kan være, Der er jo altid sygdomme og alt muligt andet, og Det er jo fordi Vi har verdens bedste normeringer. Jo så

når børnene sover tit i en vuggestue, så kan det godt være at man lige siger okay jamen bare Sådan et eller andet praktisk. Jamen vi tør lige bordene efter de har spist det behøver så i kan komme ud på legepladsen, så du ved, så man har også Sådan lidt mere elastik at rive. I fordi man kan hjælpe hinanden.

Britt

Så den her gradvise overgang fra vuggestue til børnehave. Den finder slet ikke sted, når Det er separat.

Lars

Nej nej altså for eksempel så kan jo for eksempel. Altså det gør den slet ikke det det de kan godt komme altså vuggestuen eller Vi har også de dagpenge der giver de kommer tit, men Vi skal have karl til at gå her, så er det lige over et par gange og lige leg, men slet ikke i den grad man kan gøre det, så er det. Ja du ved de lige over og kigger. Vi kan lige hilse på carl eller karl kan lige se Der er et puderum og så kan det være han lige kommer engang mere lige og kigger, men ellers så gør man det ikke nej.

Britt

Og Det er ikke noget, man opfordrer til, at forældrene sørger for.

Lars

Jo altså Jeg har jo altså Jeg har alt. Jeg har Sådan en åben børnehave. Selvfølgelig skal det ikke være der. Kommer nogen hver Dag men men men Jeg har ofte du ved nogle vuggestuer der kommer. Det er det der, og så har jeg også forældre, de kommer, de må gerne. Jeg har nogle af de kom 5 gange næsten før og lige var her bare med. Barnet i en time eller et eller andet også dengang de så rigtig startede op. Jamen så Sådan Der er det ligesom forældrenes. Hvad kan man sige, hvad de kan, og hvad de gerne vil? For mig skal de selvfølgelig være her et halvt år, men og vi vil gerne være her de første 2 uger, en time eller at køre indkøring på den måde og føle sig tryg i det. Det er fint nok for mig, men Det er nemmere, hvis du har en integreret institution.

<u>Britt</u>

Så kommer det store. One dollar one. Million dollar question. Hvis i selv hvis du nu fik muligheden for at være med til at designe en helt ny børnehave. Gerne en daginstitution, nu har du erfaring med det også. Hvilke rum skulle der være? Altså hvilke ting var så vigtigt at få med? I den.

<u>Lars</u>

Ja først, så vil jeg tænkte, der skulle mange flere kvadratmeter til. Jeg synes, Det er ikke fordi, at kvadratmeter i sig selv bare helt vildt godt, men vi mangler bare fordi, hvis du havde flere kvadratmeter, så kunne du også designe rum til det, du gerne vil. Og hvis du så kunne lukke døren, du ved, så man ligesom. Som ligesom kunne sige, nu åbner vi op for den her verden, og nu lukker vi for den her verden lige nu, der Der er er alt, næsten altid åben. fordi Vi har ikke så mange kvadratmeter. Så hvis børnene ikke skal træde oven i hinanden, så bliver vi nødt til at få fordelt dem rigtig godt. Så vi, hvis jeg skulle bygge en daginstitution, og jeg Sådan var privat dig selv, så ville jeg bygge en meget større altså flere kvadratmeter. Det næste, så vil jeg gerne have en legeplads, der ligesom var meget sektionsopdelt. Altså ligesom læringsrum er indenfor, så kunne jeg godt tænke mig et læringsrum var. Indenfor, og Det er ikke fordi det skal være Sådan helt stringent, der skal være hegn, og så kan man ikke gå i imellem dem, men det der med ligesom man går ind i et puderum verden, så kunne jeg godt tænke mig udenfor. Man gik ligesom ind i en du ved et eller andet verden. Der kan også være en konstruktions verden udenfor eller eller hvad det nu er man gerne vil fordre i de forskellige læringsmiljøer. Det kunne jeg helt vildt godt også tænke mig. Og så er der Sådan helt vildt meget praksis i forhold til børnene er jo ligesom du siger, jamen der. Vi har ikke nogen grove garderober. Vi har ikke. Vi har ikke ude. ude toilet altså Det er p**** irriterende. Det må jeg lkke sige det..

Lars

det Er irriterende at at at at når børnene er ude for, at de ikke altså de store børn kan jo sagtens gå på toilettet selv. Altså ved, hvordan skal en halv klunset af og. Og så at man får designet rum, så de både kan gøres små, men også kan gøres store som man. Fordi Vi har jo kun de ressourcer Vi har, så hvis man Sådan ligesom skal have nogen i fordybelse et sted, jamen så skal man gerne have nogle rum også hvor hvor man kan have et rigtig godt tilsyn med mange børn samtidig med at der skal være nogle gode. Du ved gode lege selvfølgelig, og det, Det er i hvert fald Vores institutioner de en udfordring, fordi vi ikke har det. Rum ligesom gøre større og mindre åbne op og lukke til og. Men når i kommer ud og snakker med jan. Jeg tror hun har en langt større, fordi hun ligesom har været i det og har bygget for en 3 år til siden og hvordan man skulle designe og de har en stor legeplads som faktisk også er indrettet i firkanter i forhold til hvad man gerne vil

have. Og så har hun har nok en større erfaring og idé om hvordan hvordan det det vil give mening. Men for mig mangler vi simpelthen kvadratmeter. Der er jo Sådan et vis antal kvadratmeter man man siger nu har jeg Det er et passe deres børn, så får jeg så mange kvadratmeter, så jeg væsentligt flere kvadratmeter.

Britt

Har du flere spørgsmål?

Lars

Og nummer 2 jeg nu virkelig virkelig så virkelig kan ønsketænker. Og hvis man nu tænkte jeg kunne bygge dobbelt så stort, så går jeg helt vildt godt tænke mig at man kunne lave læringsrum til de treårige og så måske lave eller læringsrum til de ældste altså og hvis så man så man faktisk kunne sige okay når du er de her 3 jamen så noget af det her. Det var rigtig fordrende og når du er 5 så er der virkelig noget andet, så man faktisk skulle have nogle større læringsmiljøer som er meget rettet til din aldersgruppe. Sådan hvis jeg virkelig måtte tænke ud og boksen.

Victor

I forhold til det her med at være bæredygtig. Der er der jo også en masse om, at der skal være køkkenhaver og alt muligt, hvor de kan gro i deres egen mad og så videre. Og man skal sættes ind i affaldssorterer og alt Sådan noget. Det er i hvert fald fokus på derude lige nu.

telefon ringer igen.

Det var mere bare i forhold til hvor meget det skulle implementeres. Altså det her med affaldssortering, og Vi skal vide hvor råvarerne kommer fra, og Vi skal vide hvad vi gør med dem og så videre.

Lars

Altså Vi har jo affaldssortering her. Du ved og det. Det er jo bare Sådan man gør, ligesom man er derhjemme skulle lige til at se. Og Jeg synes det. Vi har også Vi er med i skraldeindsamling og alt muligt andet, så børn ligesom får en fornemmelse af, hvad Det er men. Det Der er så er der nogen der skal have køkkenhave og nogen skal Det er nok lidt svært for et køkken har været ude, men der skal også nogen til at passe det, så Jeg synes altså selvfølgelig når de bygger nye institutioner, så skal det være et bæredygtigt certifikat og Sådan noget og det synes Jeg er super fint. Jeg synes bare altid man skal passe på med at putte noget ind. Hvor tid går væk fra børnene? Og, og Vi har jo noget, vi tænker gru vildt tænker jeg, hvis ting bare Der er nogle planter og frugter og grøntsager der. Ligesom kan passe sig selv. Så synes jeg Det er super fint. Jeg gad

også godt vi havde nogle kasser hvor der var et eller andet i de bare kunne proppe ind i munden. Og smage, hvad der kommer og Sådan. Noget, men Jeg synes, Det er en fin balancegang med at gøre det til et krav kontra, at hvis man har mulighederne for det. Ja giver det mening?

Britt

Ja så Der er en positiv. Hvad hedder det læring i det her med at Der er noget der gror og man kan være med? Til at sætte i gang.

Lars

Ja og forstå hvor tingene kommer fra og og det. Det er der jo med altså med om Det er mad om det. Det er lige meget hvad Det er, så så er det jo en opgave Vi har med at forklare hvor er det tingene kommer fra. Så ja jeg tænker det altså Det er jo bare en del af af hverdagen tænker jeg, og Jeg synes, at det skal jo være der, og Det er jo. Man kan også hvis man kører lidt videre, så skal altså Der er også den diskution skal vi have ipad i institutionerne, skal vi ikke. Der er nogen der siger, jamen, det får de nok af udenfor, og nogle mener jamen, Det er jo den verden det skal ud i, så skal vi ikke allerede ligesom de snakker om på skolerne nu ikke du ved jamen hvordan, hvordan gør vi klar Vores børn klar til det de skal ud at opleve og og Vores er jo så små, men de kommer jo også når de så skal i skole her jamen så kommer de også i en digital verden, hvor alle folk render rundt med deres telefoner og ipads de ligger og de får deres egen chromebook så. Altså hvor sætter? Man, altså skal vi gøre den klar til det, eller er det ikke Vores opgave? Og Det er jo det tror jeg lidt. Det er med mange ting Der er nye altså hvad verden går jo i en bæredygtig retning, eller hvis Vi skal være 50 år og nu, så hvis vi ikke skal ligesom skal så nogle frø i hvert fald hvis man bruger det udtryk I børnene jamen altså. Hvorfor skulle vi ikke gøre det? Fordi Det er jo det, der kommer til at præge den længere opad. Altså så så ja, Det kan man det. Det du kan jo altid pædagogik jo ligesom at gå på vejen og sige hov der står max 30, hvad er det for nogle tal og og Der er en mand og hvad er det Der er derover? Det er et rødt kryds og så de samme ting kan man jo bare bruge med det her altså man kan jo alt til pædagogik.

Britt

Og apropos læring og Sådan noget. Implementerer man engelsk og Sådan noget allerede i børnehaven er man kommet dertil endnu?

Lars

Nej nej Der er ikke let, men Der er

rigtig mange børn. Der kan engelsk, fordi Der er rigtig mange børn der ser youtube og det foregår på engelsk, så vi kan have børn der kan kan flere sætninger på engelsk fordi at de bare hørte det samme klip på youtube og se den samme video og hele mange gange og så er vi for. Ja Det er nok. Vi har jo 15 år siden, så hed det her den internationale børnehave. Derfor er alle de skilte især nogle gange på døren, og de står både på dansk og engelsk, fordi at i helt gamle dage der havde man så når man havde nogle udenlandske børn. Jamen så kom de her hen. Nu er det jo bare altså alt er jo integreret jo, men Vi har ikke Sådan engelsk undervisning, men mange af Vores samtaler foregår på engelsk, fordi forældrene ikke kan dansk, så foregår de på engelsk ellers skal vi have en tolk med men men Der er ikke Sådan en, hvad kan man sige, Der er ikke læring på engelsk.

Britt

Har du mere du er kommet i Tanken om lige, mens vi sad og snakkede.

Victor

nej Jeg synes Det er Det er fint Det Vi har været inde på.

Britt

Jamen så tror jeg egentlig, vi gerne ville rude af med at høre om der var om der om i kunne være åbne overfor, at vi når vi engang kommer lidt længere i processen har og har noget mere konkret om vi kunne komme ud og så høre jeres holdninger til nogle forskellige designs.

<u>Lars</u>

Ja selvfølgelig. Det må i gerne i ringer bare.

Britt

Og og i den forbindelse vil egentlig høre, om vi. Må få en mail. Fordi så kunne vi sende noget materiale med. Og også i forbindelse med om Der er mulighed for at kunne aftale noget, vi kalder det brugerundersøgelse. Men med børnene. hvilke muligheder, der ville være for, at vi kunne komme og vise nogle billeder og høre hvad de stille nogle spørgsmål til børn.

Lars

Altså hvis det Sådan noget med at Jeg har gang haft nogen der har haft et eller andet. De har været udviklet noget legetøj faktisk. Og så legede børnene med det. Og så havde de Sådan. 2 spørgsmål, var det sjovt med at kunne være bedre? Hvorfor var det ikke sjovt? Det må i gerne, men hvis i har Sådan en følgeton af spørgsmål, det vil jeg gerne. Du ved det skal være det skal nej, og det skal være spørg-

smål, der kan stilles i plenum, altså hvor de sidder der normalt. Så har vi en skolegruppe på 8 eller 10, og vi kan sagtens sige Det er de her 5 børn og vi kan også sagtens lave jamen hvad tænker i om det her eller hvad tænker i om det her?

Lars

Men de kan holde i 20 minutter. 15- 20 minutter, så så går koncentrationen ikke længere. Men Det kan vi sagtens finde ud af. Når i kommer der til.

Victor

kommer ikke til at tage så lang tid tænkte Jeg. jeg har arbejdet i en børnehave så jeg ved godt hvor koncentrationen... Og når først man går i gang. med Et eller andet, de ikke synes, er helt optimalt.

<u>Lars</u>

Jamen Det er der jo hurtig respons ja men det finder jeg. i kan bare. Ringe, så finder vi ud af det.

Britt

For Vi har også en lille tanke om, at vi måske gerne ville have nogle børnetegninger, som vi kunne putte i Vores rapport.

Victor

Det kræver jo lov for alle mulige.

<u>Lars</u>

Ja, Jeg tror hvis Det var en tegning, så tror jeg ikke, Der er jo ikke noget der kan jo ikke Det kan ikke kan ikke relatere til nogen børn så så så så øm i får 10 tegninger fra det tror jeg ikke. Det kunne jeg ikke forestille mig der kunne være noget galt i.

Britt

Ja som vi også har snakket lidt om, så hvis Vi skal vi jo have designet en ny børnehave, og vi vil gerne have fokus på bæredygtighed også og primært. CO2 aftrykket fra børnehaven, men vi vil også gerne samle op eller opholde det i forhold til, hvordan brugerne så. Oplever de her nye tiltag og materialevalg og så noget, man bliver nødt til at tage for at kunne komme ned i CO2 aftryk, og derfor er vi så nu ude og har snakket med både Bornholmsgade og så har vi i går været ude ved Stjernen, som vi kan forstå, at der kender du l ars.

Jane

ja Det er jo en gammel. en gammel børnehave.

Britt

ja det er det nemlig? For at få lidt forskellige input både til hvordan hverdagen er, men også hvilke virkemidler man bruger for. til i forhold til læreplaner, men også i forhold til at at børnene skal trives. Så ja, Vi har lidt spørgsmål. Nu har vi været igennem nogle af dem egentlig da vi. Bare har været rundt. Og kigge, men vi kunne godt tænke os at starte ud med at høre. Hvilken baggrund du har?

<u>Jane</u>

Jeg er uddannet pædagog.

Britt

Pædagog ja og og har du er du startet direkte her eller har du været? Hvad har du været i før?

<u>Jane</u>

nej før der var jeg leder af en lille børnehave, og så har jeg været med i hele byggeprocessen her, og så blev det besluttet, at vi lukkede den lille børnehave. Der har man faktisk vuggestue i forhold til at lave en bæredygtighed omkring pladser. Og så flyttede de børn, vi havde herovre, så jeg været med fra starten her. Ja.

Britt

Hvordan ser hverdagen så ud her? Hvornår kommer børnene ind og hvad laver de i løbet af dagen? Hvornår tager de hjem?

<u>Jane</u>

Altså Vi har åbent 6:24 og lukker 16:30 og Der er børn fra start til slut. Jamen, det handler jo om organisering. Jeg

Karolindelunden first interview With Jane pedagogical leader

har jo valgt at gøre det Sådan, at Der er én åbner. en pædagog der åbner, og Det er Det er fast altså de har. En åben om ugen og så fredag ruller og så. Hvis nu Det er personale fra pædagog fra gul der åbner, så er det næste der kommer 7:15 er fra. Grøn i forhold til det der med kendskab til børn. Klokken 7:30. Hvis der ikke er sygdomme og alt Sådan noget, så er der personale repræsenteret fra alle 4 grupper, og så går man egentlig vi åbner i al-rummet og 7:15 når nummer 2 kommer, så går man på afdelingerne og 7:30 er alle grupper åbne. Ja, og de er åbne indtil klokken 16. Og så trækker vi ud i al-rummet og så er der 2 til luk 2 personaler en fra grøn og en fra gul ja og så kan man sige at. Jeg tror Det er meget standard sørge for at de får deres frugt klokken 9. Så spiser de frokost 11 11:30 så går de ud på legepladsen eller sover til middag og så kom de ind og får eftermiddagsmad. Og så leger de, og så tager de hjem. Men Sådan. Sådan helt stramme struktur på gruppen. Den er jo bestemt, af den børnegrupper der er. Så Det kan de godt gøre en lille smule forskelligt. Vi arbejder alle sammen med visualisering og piktogrammer. Og så har vi den samme lovgivning som stjernen og bornholmsgade ikke også og skærer omkring de samme. Men jeg tænker meget Sådan. Jeg tror, vi betragter læreplanstemaerne som på en måde Sådan lidt ligesom skolefag, at Der er et pædagogisk grundlag, og Det er det allervigtigste. Børnene har ikke selv valgt at være her. Der skal være en god stemning, og det skal være rart at være her, og så putter vi noget ind, og Det er de virkelig gode til at putte alt muligt ind, og der har vi også prøvet at sagt nå, men okay, Vi er bæredygtighedscertificeret. Hvordan kan vi omsætte det til pædagogisk værdi? Og der har vi jamen, vi arbejder med og spille køkkenet, men det tænker, det gør de alle steder nu om dage, så har vi en ide om, at der ikke er noget, Der er ingenting, så Vores juleklip, Det er ud fra. Jeg havde nær sagt skrammel eller dillerdaller forældre har haft med hjemmefra. Ja laver juletræ ude af mælkekartoner og altså der Der er de gode og så køber vi også karton eller har legetøj. Det er jo ikke sådan at de bare leger Med en pind her. Så jeg tænker egentlig Sådan meget standard, så deler de dem ind i små grupper, men det tror jeg også man gør alle steder. Så har vi sproggrupper nogle gange, fordi det skal vi også arbejde

<u>Britt</u>

okay. Hvor meget tid vil du sige Sådan, hvis du skulle fordele det Sådan 50, 20 eller hvor meget det nu kan være imellem at i er i de. Store men stue visse grupper og så at stuerne bliver inddelt i endnu mindre grupper. Eller afhænger det meget af hvor meget...?

Jane

Ja jeg skal lige til. Det er fordi jeg tænker klokken 8. Jeg vil Jeg vil sige fra 8 til 15 Der er de inddelt i mindre grupper alle, men så er vi ude på legepladsen og Der er de jo Der er personale jo også fordelt og Der er de. Jo også i grupper. Men de er jo mere fleksible på en eller anden måde. Men Jeg vil egentlig tænke nu kan. Du se at. Org det bliver så teknisk at en stue på gul og en stue på grøn. Det er dem der har flest børn. De kan komme op på 27 børn. De går jo allerede. Ud i alle rum med klokken 8 om. Morgenen med en gruppe for at der ikke skal være så stort et tryk inde på gruppen. Ja, så der har de jo allerede fordelt sig, så kan det være Det er fra klokken 8.30 på den gruppe. Der er mindre ja. altså Det kan det. Kan jeg simpelthen ikke lige gøre op i tid. Det synes Jeg er svært, men men jeg tænker de gør det hele tiden. De spiser jo mindre grupper Det er altså. Både for børn og de voksnes arbejdsmiljø. Men Jeg er glad for, at altså dengang vi blev bygget, altså Vi er organiserede Sådan i Aalborg Kommune, at at nogle institutioner er sammen, og hver institution har deres pædagogiske leder. Og så er man organiseret i et dagtilbud, hvor Der er en dagtilbudsleder. Og Det var jo mig og min daværende dagtilbudsleder, der ligesom var involveret i det her projekt. Hun var også leder for bornholmsgade. Og hun var også leder for egholm færgevej, og der var da nogle ting, vi lærte af plus der hvor vi kom fra ågardem. Og Det var en gammel institution, som vi gerne ville have som gav mening og nogle ting, vi ikke ville og det. Men Det er også organisering, men Der er Bornholmsgade jo bygget med mindre grupperum ud i al-rummet. Og det sætter større krav til organisering, altså det der med at man skal flytte sig fra. A til B. Der er også lavet en Grethe Kragh Müller har lavet en lille rapport, som nok er ved at være lidt gammel nu, men over for København omkring kvalitet i små og store institutioner, så den har vi også kigget til. At det der med at de skal ikke bevæge sig for langt, fordi det kræver for meget organisering, og Det kan være for svært at hente hjælp. Og så kan man sige noget, så bliver vi bare her. Så er man en større gruppe. Ja.

Britt

Så i har bevidst prioriteret, at Det er nogle store grupperum. Med nogle mulighed for at lukke ind til nogle små og så ellers al-rummet i stedet for at have rigtig mange små.

<u>Jane</u>

Ja ja, og Det var det, jeg sagde dengang vi fik. Vi har x antal kvadratmeter. Der har vi også prioriteret lidt på Vores garderobe, fordi Vi har tænkt det, kan vi organisere os ud af. Vi kan ikke grupperne. Det er der, Vi er størstedelen af tiden og der altså Det kan vi ikke organisere os ud af. Jeg tror Vores alrum skulle være 45 kvadratmeter. Det var det, vi selv havde prioriteret. Og så lagde de så ekstra til, og Det er vi glade for. Men det, Det var altså det, vi skulle have.

<u>Britt</u>

Nu siger du, Der er nogle ting som i har taget med og nogle ting som i har prioriteret ikke at få med fra de andre kan du komme her ind på hvad det mere specifikt er for for tiltag i enten har taget eller fravalgt.

Jane

Jamen for eksempel så har altså så har vi fravalgt funktionsrummene som Bornholmsgade var bygget til. Og Vi har. Tilvalgt Det var faktisk tror jeg ovre i Thomas boss. Hvor hvor Jeg kan ikke huske om de havde det. Eller Det var i hvert fald en gammel leder, der sagde, men dengang vi havde håndvaske inde på stuen, hvor man ikke skulle gå ud på badeværelset. Det er derfor, Vi har den håndvask og det der kokkearrangement ude i garderoberne. Det er Sådan helt konkret Jeg kan huske. Men så har vi jo også valgt i forhold til. Altså vi havde jo møde om døre. Hvad for nogle døre skal der være glas i? Hvor skal der være glas? Altså der har vi jo valgt. Jeg tror ikke, Der er kommet glas i dørene, men Der er glas ved hver indgang til et grupperum, fordi Vi har tænkt, men Det kan være et enkelt vindue. Her kan man sige farvel til sin mor og personale kan hjælpe, uden Vi skal gå fra en større børnegruppe. Og det tror jeg måske i virkeligheden ikke er nogen af os, der havde, men Det var et drømmescenarie ud fra den praksis, hvis du i.

Britt

Og Der er det så også prioriteret, at det ligesom er både voksen og børnehøjde. Ja. Ja så har jeg lagt mærke til at II hvert fald i alrummet var det vist kun ja at der har i Sådan en trælameller på. På væggene er det noget i Sådan er glad for at kontra. Her er en almindelig hvid væg, men måske lidt nemmere kan hænge ting op på.

<u>Jan</u>e

Ja, men Det er nok fordi Det er Vores alrum. Jeg synes jo Det er simpelthen. Det er så flot det alle rum og det tænker jeg prøv at tænk at være barn og begå sig i noget Der er så fint hvor ja altså Jeg er virkelig chokeret over. Altså hvor hurtigt Vores vægge er blevet mærket af brug, og Det er jo også børn der går og kigger på og hvor jeg tænker, men Det er træet ikke. Det har holdt sig pænere. Jeg tror da ikke at Jeg vil være så glad ved kun at have 3. Men, men Jeg synes bestemt det. Det kan noget. Der er også nogen der kan være irriteret over, at vi ikke kan hænge så mange ting op, men det nye er at de rigtig meget begyndt at bruge de der. Hvad hedder de små alkover eller siddepladser? Til at hænge ting op i ja vinduerne har de også hængt meget på. Så ja Det er jeg, og Jeg er glad for det der. Med at Det er nogle forskellige indtryk. Men Det er ikke sagde altså alle de der akustikplader. Dem er jeg jo virkelig virkelig glad for, fordi Jeg er glad for Der er en god akustik her, og Det er en af de store arbejdsmiljømæssige udfordringer for pædagoger. Og jeg tænker også det med til at bidrage til et godt børnemiljø. Men til stadighed Vi har 6 år. Der skal jeg gå hen og pille ting ud. Der er hængt dig på, fordi personalet nogle gange kommer til at glemme det ikke er en opslagstavle, og de kan forstyrre nogle ting man gerne vil. Altså det blev jeg også overrasket over selv. Det havde ikke dengang jeg stod her det. Var færdig at. De fyldte så meget på Vores vægge. Når der kunne vi ikke hænge en hylde op. Der kan vi ikke lige sætte noget op, men der tænker jeg bare Sådan nok, men der får. Vi noget andet. Som Vi skal være glade for at prioritere. Ja.

Britt

Det var en god en. Nu for eksempel på på stjernen, der har de et tumle rum eller et puderum, tror de kaldte Det er det noget, som i enten har mulighed for at gøre noget alla det eller er der et andet sted, som i kan tage hen til, eller for nu havde i ikke et her specifikt?

<u>Jane</u>

jo.

<u>Britt</u>

i har et?

Jane

Ja Eller jo? Og nej, Det har vi faktisk. Det har vi haft nok. OK så i 5 år.

Vi kan godt nogle gange nedlægge det, men Det er igen lidt bestemt af en børnegruppe. Og Jeg tror faktisk lige nu, Det er nedlagt i gul afdeling faktisk i begge, men grøn har det. Og så tager for eksempel i går, så så er der de ældste børn, så er de inde og hente puderne, de står stablet lige her, så er de inde og hente puder nu til alrummet og leger en leg med dem. Så der har vi haft det samme. Men Jeg synes undskyld, at Det er noget af det Vores alrum kan der kan vi. Altså Vi har også fredags samlingen derude, hvor vi samler alle børn Sådan ret kort seance, men alligevel ikke også Sådan en slags morgensang. Der er det let lige at rydde nogle borde til side, altså der. Der kan man også godt noget bevægelse derude, og ellers så er det jo legepladsen.

<u>Britt</u>

Er børnene med til, når der kommer nye børnegrupper eller børnegrupperne, skifter er de med til at. Og indrette, hvis man kan sige det Sådan og og sige jamen, Det har jo det. Her kunne vi godt tænke os eller i form af at de lige pludselig som du siger, tager nogle eller nogle puder med et sted hen. Er det noget i. Agerer på eller Sådan at i indretter efter det, som i kan se børnene gerne vil.

Jane

Nok i mindre grad. At børn Sådan lige siger et eller andet, fordi jeg tænker at de havde ikke hentet de puder, hvis ikke der var en voksen der har skabt de muligheder for at hente de puder. Og og nu er der en der har gjort det, så kan de jo efterspørge det andre gange eller nogle andre børn fra en anden gruppe kan have set det, så kan de også efterspørge det. Altså der skal lidt være lagt en skinner for dem, og så tænker jeg altså Vores arbejde. Det er jo rigtig meget at kigge på børns adfærd det. Det er jo også været med til, at vi lige har fjernet puderne i en periode, for vi tænkte, Det er med til at udfordre nogle børn, Der er i nogle vanskeligheder, som gør deres position endnu mere. Usikker og så, og så har vi prioriteret dem. Ja.

<u>Britt</u>

Da i så eller når i har puderummet er det et rum, hvor lydniveauet og Sådan hele aktivitetsniveauet kan komme ret højt op.

<u>Jane</u>

men Det er jo et lille rum men ja, men men men også nej altså fordi Det er jo ikke ligesom en gymnastiksal.

Britt

Men Det er ikke Sådan at det trækker med ud. Altså så det er ligesom i det rum.

Jane

Jamen det synes jeg, men Det kan også variere, fordi nogle gange kan det egentlig også være at. Det mere bygger. Med de puder, og andre gange kan de jo tage Sådan en heftig pudekamp. Jeg tror det. Det er nok lidt forskelligt også igen. Hvad er det for nogle børn?

Britt

OK, men Det er ikke Sådan, hvis de for eksempel har pudekamp i puderummet, at de så tager ud og så lige pludselig gør den på stuen..

Jane

Nej, Det er ikke derfor, at Det er blevet nedlagt, fordi Det har været meget tydeligt, hvad det her rum er beregnet til. Ja.

Britt

Kan i mærke forskel på, hvordan børnene de agerer i alrummet og i den store del af stue rummene og så de små dele.

<u>Jane</u>

Ja jeg forstår godt dit spørgsmål.

Britt

Eller har det mere med indretning at gøre?

Jane

Det kan være både have noget med indretningen og gøre. Det kan også have noget med børn at gøre. Tror jeg altså det. Det er jo altså Det er simpelthen så svært at sige. Man kan sige den tydeligste forskel kan vi jo mærke på legepladsen og det at være inde. Både jeg tænker, at Der er nogle små børn, der måske kan blive lidt utrygge, fordi Det er en stor verden og tør jeg cykle og hvad der nu kan ligge i det. Herinde det tror jeg jo på alrummet. Der kan jeg huske i starten. Der havde jeg meget Sådan den der tanke mellem vi Vi skal blive på grupperne så lang tid som muligt, fordi Der er børn trykke de kender de voksne de. Og børnene viste bare noget andet, hvornår må jeg komme i al-rummet? men jeg vil også i al-rummet. hvor jeg bare tænke what. så det begyndte vi at bruge på en anden måde og der kan jeg huske en en pige som som bare stod Sådan her Sådan helt stiv hvor jeg tænkte hun var lidt gået i frys. Hun har drømt om det her. Men havde nok lige brug for at se, måske også fordi hun var blevet smidt af en stemning om, at der var noget attraktivt ved at komme ud i det alrum, men har i hvert fald brug for at se det først. Og lige inden hun agerede tryk der der tror jeg alrummet kan godt være en. Fordi Det er også på en eller anden måde er lidt mere fælles,

så Der vil der også være nogle børn eller nogle voksne man ikke kender så godt, så så måske alrummet kan jeg se en lille smule de er. Altså både nogle der virkelig giver den gas og synes det bringers Tivoli det her. Det er fedt og også nogle Der er lidt mere forsigtige ia.

<u>Britt</u>

Ser i nogle grænser i de den lovgivning, Der er både i forhold til som du snakkede om i folk med køkkenet og Der er noget hygiejnisk og Sådan så.

<u>Jane</u>

Det tænker jeg da nok der er.

Britt

Men ikke noget, som i Sådan tænker over til hverdag og tænker Ej Det er..

Jane

Men Det kan bare på en måde heller ikke. Rigtig svare sig for. Altså fordi jeg tænker, men Jeg kan huske der var nogen der gerne ville lave æble suppe til i efterårsferien. Ude på bål og så og så skriver en køkkenmedarbejder hver rammerne, for når i skal lave det her. Altså Vi har jo et økologi regnskab. Vi har altså nogle ting der skal være i orden og det tror jeg da nok det tog pipet lidt fra nogen, men jeg tænker jeg tænker nok bare ja, men det altså Sådan er det videre. Altså Det kan ikke så godt svare sig. Altså der tror jeg med at vi kigger på hvad for nogle muligheder har vi inden for det vilkårsrum vi har?

Britt

men i har bobleplast.

<u>Jane</u>

Nej nej det fordi Det har vi valgt fra, fordi vi ligger i karolinelund, så Det var et helt bevidst valg om, at hvis vi laver et bålhus her. Så havde vi en tanke om, at så havde vi nogen, der nærmest boet her. Så Det har vi ikke. Vi har bålfad, som vi flytter ud og og vi laver bål ja.

Victor

Jeg tror Det er det sidste spørgsmål, hvis.

<u>Jane</u>

Ja, nå ja, tiden.

Britt

Men så vil vi nok egentlig gerne stille det store spørgsmål. Nu har du jo været umiddelbart været med i processen med at bygge det her. Men hvis du skulle bygge en ny daginstitution hvor der ikke var en hel masse, altså hvor man ikke skulle tænke på lovgivning eller noget som helst rent ønsketænkningen. Hvad ville drømme

senariet så være i forhold til funktioner? Og hvis Der er nogle tanker i forhold til hvordan i indrettede i forhold til hinanden og Sådan noget. er der noget du ville gøre om udover forskellige kvadrater eller flere kvadratmeter?

Jane

Jamen altså måske placeringen af det depot altså og ikke den der væg altså der. Er virkelig ikke. Jeg drømmer scenarie, flere personale og flere kvadratmeter. Og det tænker jeg, ligesom Det er ikke. Det er derfor det også bliver Sådan lidt. Hvad skal jeg svare på? Fordi det findes på en måde ikke vel? Men men det det altså jeg tænker Vi har nogle gode rammer, og Jeg kan godt lide det der med. At Det er det små i det store og det og Jeg tror på altså, men Det er jo også mit pædagogiske ståsted. Jeg tænker, men Det har børn Der er 3 til 6 år er brug for. De har ikke brug for frit valg på alle hylder og altså jeg tænker Det er en kæmpe verden de skal navigere i, hvis de kommer fra dagpleje eller vuggestue. De har det. Det er alt rigeligt stort.

Britt

ville i være interesserede i, hvis vi når vi kommer lidt længere i processen og har noget konkret design, at vi kunne kontakte jer og så få noget respons på det.

<u>Jane</u>

ja, hvis Jeg har tid ja ja selvfølgelig.
Ja fordi Jeg kan godt have perioder
hvor Jeg synes Der er meget at og
Det er svært at finde altså. Det er jo.
lkke fordi ja, vi vil gerne hjælpe de
uddannelsesinstitutioner, Der er Sådan
noget, men men Der er selvfølgelig
nogle opgaver, der står for ikke i køen
så så det må jeg gerne prøve

29.02.2024 10.54

Mail - bpeter19@student.aau.dk

Re: Tilladelse fra Næstved Kommune til brug af illustrationer i speciale opgave

Britt Søholt Häuser Petersen

to 22-02-2024 17:04

Sent Items

Til:Bernhard P. Schwegler
bpsch@naestved.dk>;

Hej Bernhard

Jeg undersøger hvordan kravene til Ica og de valg man bliver nød til at tage for at få en lav GWP har for brugerne i forhold til funktionalitet og velværd.

Tusinde tak for tilladelsen og de hurtige svar.

Hilsen

Britt Petersen

Den 22. feb. 2024 kl. 14.24 skrev Bernhard P. Schwegler
bpsch@naestved.dk>:

Hej Britt,

vi ser ingen problemer med, at du benytter illustrationer fra vores udbud til dit speciale.

Hvilket perspektiv har du på materialet?

Hvis det kan give os nye perspektiver, må du meget gerne sende mig arbejdet Det er dog IKKE en betingelse for, at du kan benytte illustrationerne.

Held og lykke med dit speciale!

Venlig hilsen

Bernhard P. Schwegler

arkitekt maa

<image001.jpg>

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