Room to grow

FREJA PALERIUS
This project is focusing on learning environments. I have researched what a learning environment can be, what it can look like and how it can function in a slightly different way than they do today.

My project is an addition. It is a series of modules that can be assembled differently according to site and are meant to function as a support to existing school buildings in urban environments.

I began by reading scientific articles about what happens to humans and especially children growing up in urban environments with little or no interaction with nature in day to day life.

1. **Health** - The most immediate outcome is loss of the associated benefits to health and wellbeing. Studies have found that exposure to nature increase both physical health and psychological well being. The reduced contact with nature have also proved to influence children’s development. Empirical research suggested that children whose home environment offered easy access to nature, were more likely to have higher levels of cognitive functioning. Regular contact with nature is thought to be vital in ensuring proper social, emotional, cognitive and motor development in both children and youth. Children, whose homes had nature nearby, also coped better with life stress than those whose homes lacked nearby natural areas.

2. **Emotions** - Not only does the loss of interactions with nature undermine human health and wellbeing, it also changes peoples emotions towards nature. People growing up in rural environments exhibit a more positive emotional connection with nature than those growing up in urban environments. The authors found through their study, that if an individual experience inclusion with nature, he or she will care for it, wanting to protect it. However, if an individual experience exclusion from nature, that person will protect him or herself over nature. Exposure to natural environments and direct contact with nature was also shown to improve people’s “biophobia”, the fear of nature. Indifference to nature increase unconscious consumption.

3. **Attitude** - A loss of interaction with nature changes people’s attitudes towards nature, including the value they place on it and the willingness to protect it. There is no need for a daily contact with natural environments to change this. Even just a few days of outdoor experience could have a long term effect on an individual’s emotional connection with nature, ecological beliefs, knowledge and willingness to display pro-environmental behavior. Participating in wild nature activities such as hiking, camping, tending flowers and gardens, in early childhood before the age of 11 would make these individuals more environmentally friendly as adults.

The school environment is, at it’s best, an inclusive space where it is possible to give children the tools they need to learn how to take care of themselves and their natural surroundings.

This project aims to create a different context for learning. A space that is designed to create balance using green spaces in urban environments as an educational tool. This can help children growing up in urban environments to develop on a personal and interpersonal level, remove indifference or fear of nature and contribute to a healthy emotional, cognitive and motor development within each child.

According to the U.N over 50 percent of the world’s population is urbanized. It is interesting to think about what that will do to us, what the effects are going to be and what we can to about it which is why I made this addition.
A research of material, form and colour.
1. Kitchen
   50 m²

2. Breakfast and lunch room
   24 m²

3. Greenhouse
   24 m²

4. Library - Meeting room
   30 m²
In conversation with one garden educator at Rosendals garden and a teacher I made a set of 9 different modules with different content. The modules have access to water and restrooms. All of them are studio spaces that can be booked by teachers who want to conduct their class in a different context.

The modules can be assembled in different ways according to site.

It is a simple wood construction that is easy to put together leaving little or no mark on the ground.

Suggested combination of modules, size small.

Suggested combination of modules, size medium.

Suggested combination of modules, size large.
I mapped out all elementary schools that exist and that are currently in use on the south island of Stockholm. What year they were built and how many students attend. They are all built in the 1800 hundreds with the exception of two, they all have small paved school yards. The school curriculum and the understanding of children’s development have changed since they were built. The schools do not reflect it.

In an example of what the addition could look like I have placed all 9 modules on a site near Sofia skola, in a public park. Students can be dropped off at the addition in the morning or finish the day in this environment that is different from the main school building. A permanent staff of at least two garden educators work in the garden. This could be optional but I believe it is necessary since they have the knowledge required to care for the garden and involving children in their work, that teachers to not have nor should be expected to have.

Exterior drawings of the modules assembled.
<table>
<thead>
<tr>
<th>Number</th>
<th>Space Description</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Studio space nr1</td>
<td>50 m²</td>
</tr>
<tr>
<td>2</td>
<td>Contemplation room</td>
<td>35 m²</td>
</tr>
<tr>
<td>3</td>
<td>Outdoor washing station</td>
<td>10 m²</td>
</tr>
<tr>
<td>4</td>
<td>Studio space nr2</td>
<td>30 m²</td>
</tr>
<tr>
<td>5</td>
<td>Kitchen</td>
<td>50 m²</td>
</tr>
<tr>
<td>6</td>
<td>Breakfast and lunch room</td>
<td>24 m²</td>
</tr>
<tr>
<td>7</td>
<td>Greenhouse</td>
<td>24 m²</td>
</tr>
<tr>
<td>8</td>
<td>Library - Meeting room</td>
<td>30 m²</td>
</tr>
<tr>
<td>9</td>
<td>Bookable classrooms 1st floor</td>
<td>168 m²</td>
</tr>
<tr>
<td></td>
<td>Staff room 2nd floor</td>
<td></td>
</tr>
</tbody>
</table>

Simulations of the modules assembled.