

Thursday 31th July  
Thematic Session: Children's  
Perspective in Environmental  
Perception  
Room 5

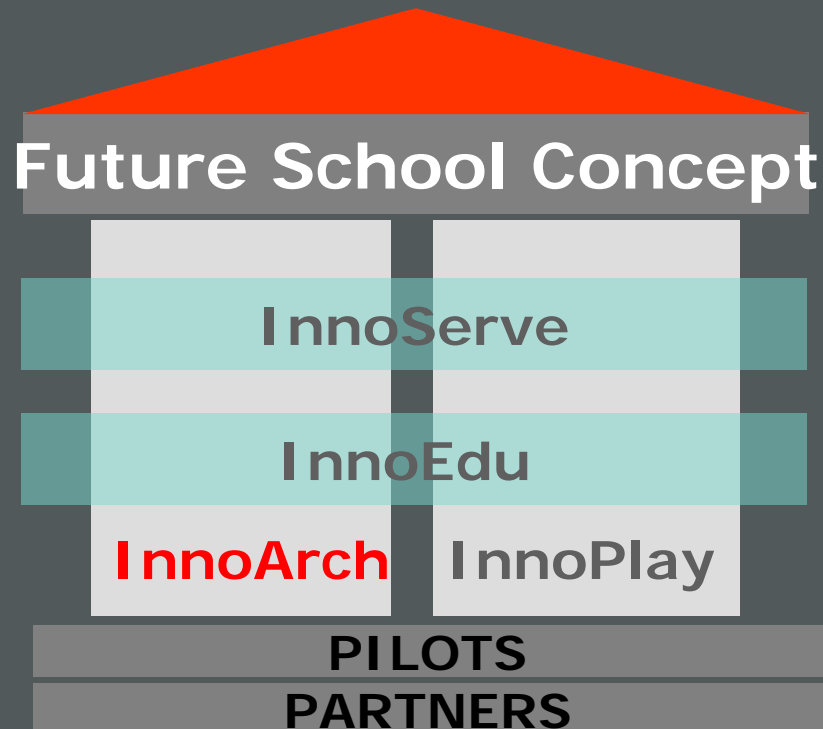
# **Collaborative Planning and Design Constructing Children's Epistemic Agency**

D.Sc., Arch. Helena Teräväinen,  
D.Sc., Arch. Aija Staffans  
InnoArch: Spaces and Places for Learning



HELSINKI UNIVERSITY OF TECHNOLOGY  
Department of Architecture  
InnoArch: Aija Staffans & Helena Teräväinen

## Context:



# InnoSchool

1.1.2007-30.6.2008 & 1.9.2008-28.2.2010

Helsinki University of Technology,  
Department of Computer  
Science and Engineering,  
SimLab

University of Helsinki, Faculty of  
Behavioral Sciences, Center  
for Research on Teaching

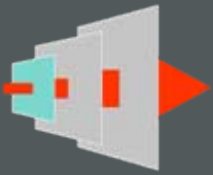
Helsinki University of  
Technology, Department of  
Architecture

University of Lapland, Rovaniemi,  
Faculty of Education, Centre  
for Media Pedagogy



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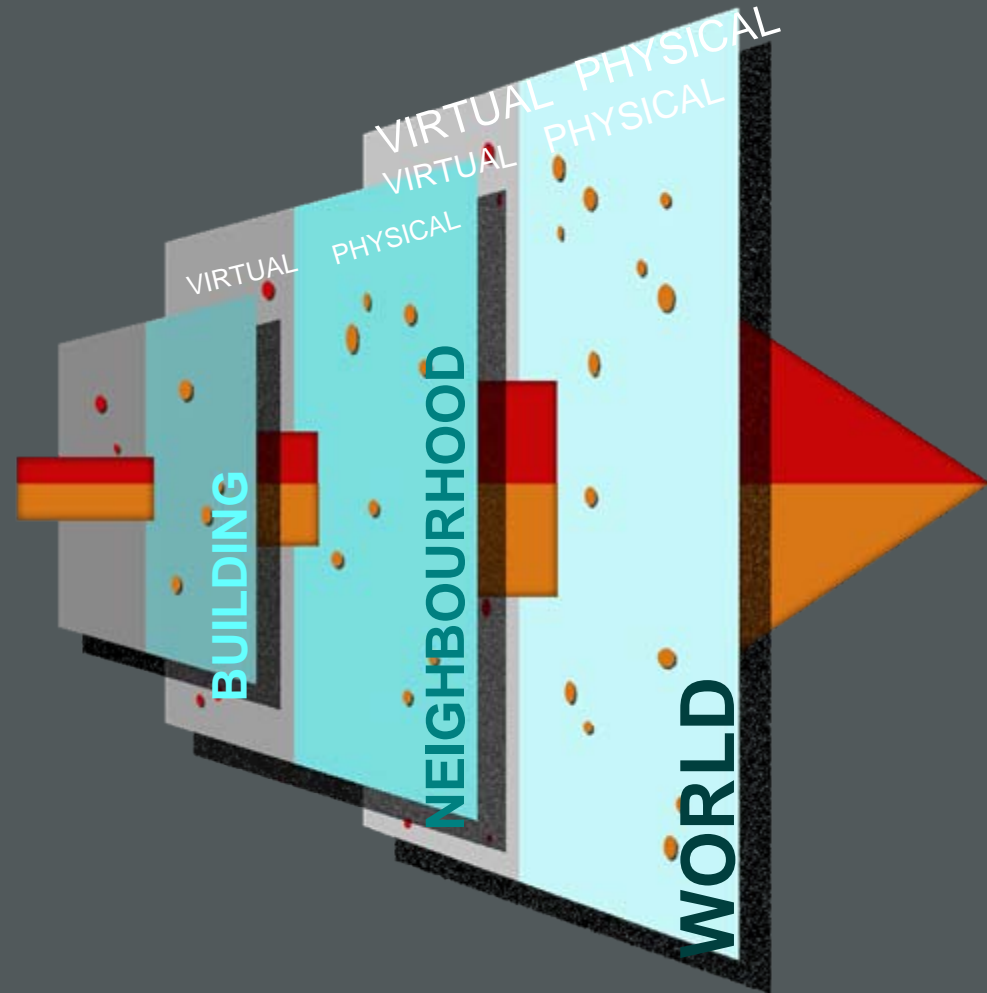
*Funded by TEKES = Finnish Funding  
Agency for Technology and Innovation*

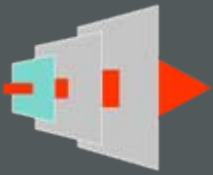


**Primary Goal:** to deepen the understanding of the interrelationship between a spatial experience and a meaningful learning process (TSL)

### TSL\* processes

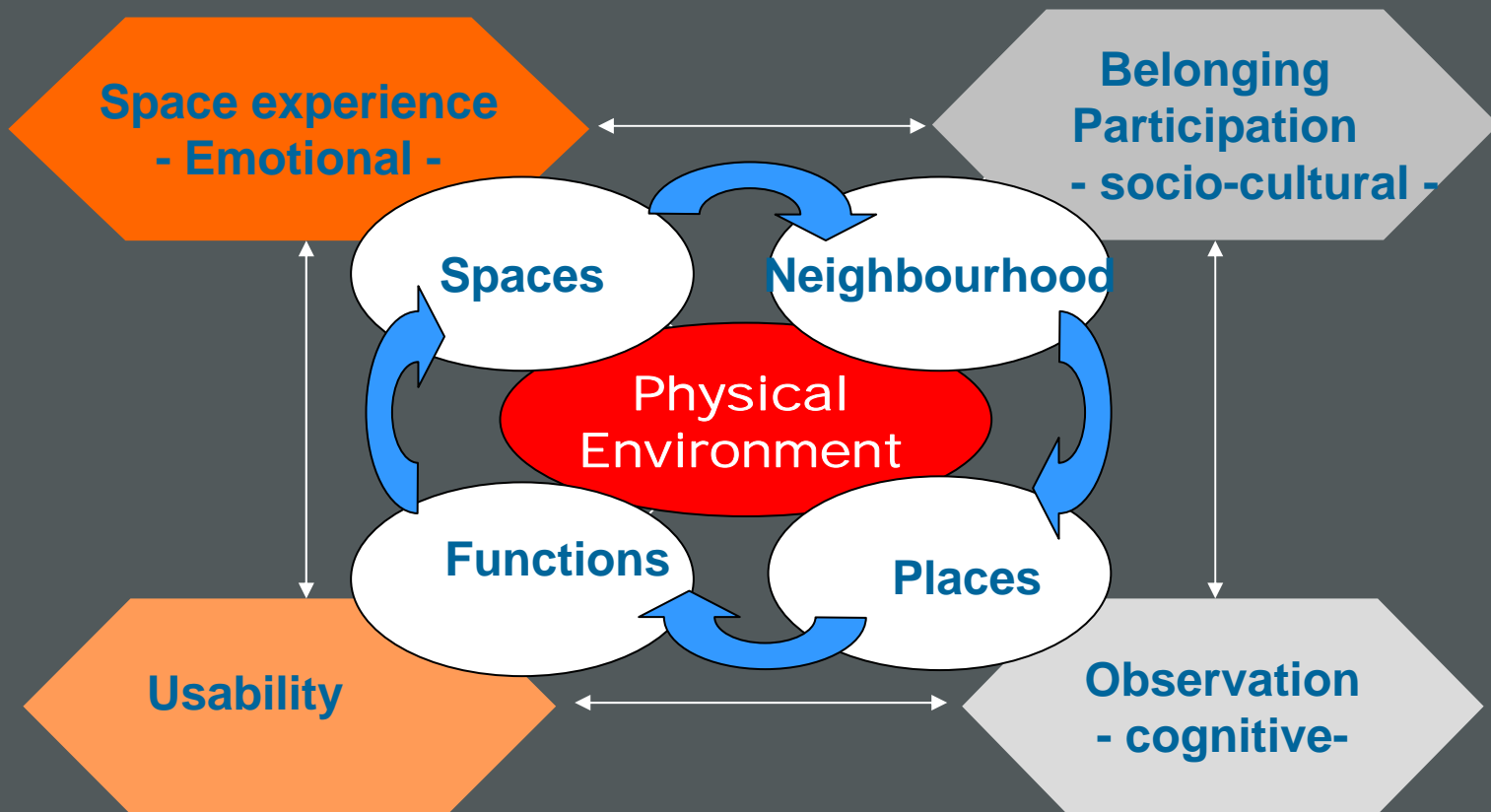
**Secondary Goal:** to develop a collaborative, inquiry based planning and design process for the future school





## Research Frame and Focus Areas

### *Space & Experience*



*"Place & mapping"*



INFORMAL

NONFORMAL

FORMAL

**Pedagogies**

**Places and Spaces**

**Processes**



# Places and Spaces for Learning

## Indoor Studies

## Outdoor Studies

Spatial experiences  
of the school house

Usability Report of  
the school house  
(users' view)

Qualities for the  
Pedagogical

Teamwork

Improvements  
in Peda&Arch  
interaction in  
design

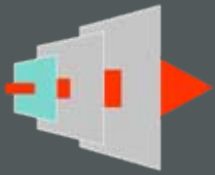
Improvements in  
dimensioning the  
school house

**Children's participation  
& "New School  
Typologies"**

TSL supportive  
environmental qualities  
(teachers's view)

•TSL supportive  
environmental qualities  
•children's view





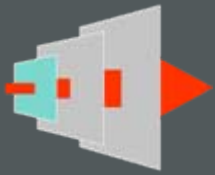
**InnoArch**  
IAPS 2008

**Indoor Studies/Case Opinmäki/ Sub-study :**  
**Children's Collaborative Workshops**  
**at Arkki School**

**Children's participation  
& "New School  
Typologies"**



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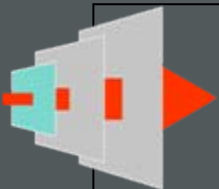


**Research Questions** *1. How/ In what ways can the collaborative planning and design process with children act as a tool for active citizenship and cultural learning for children?*

*2. How/ In what ways does children's environmental local knowledge enrich urban planning?*



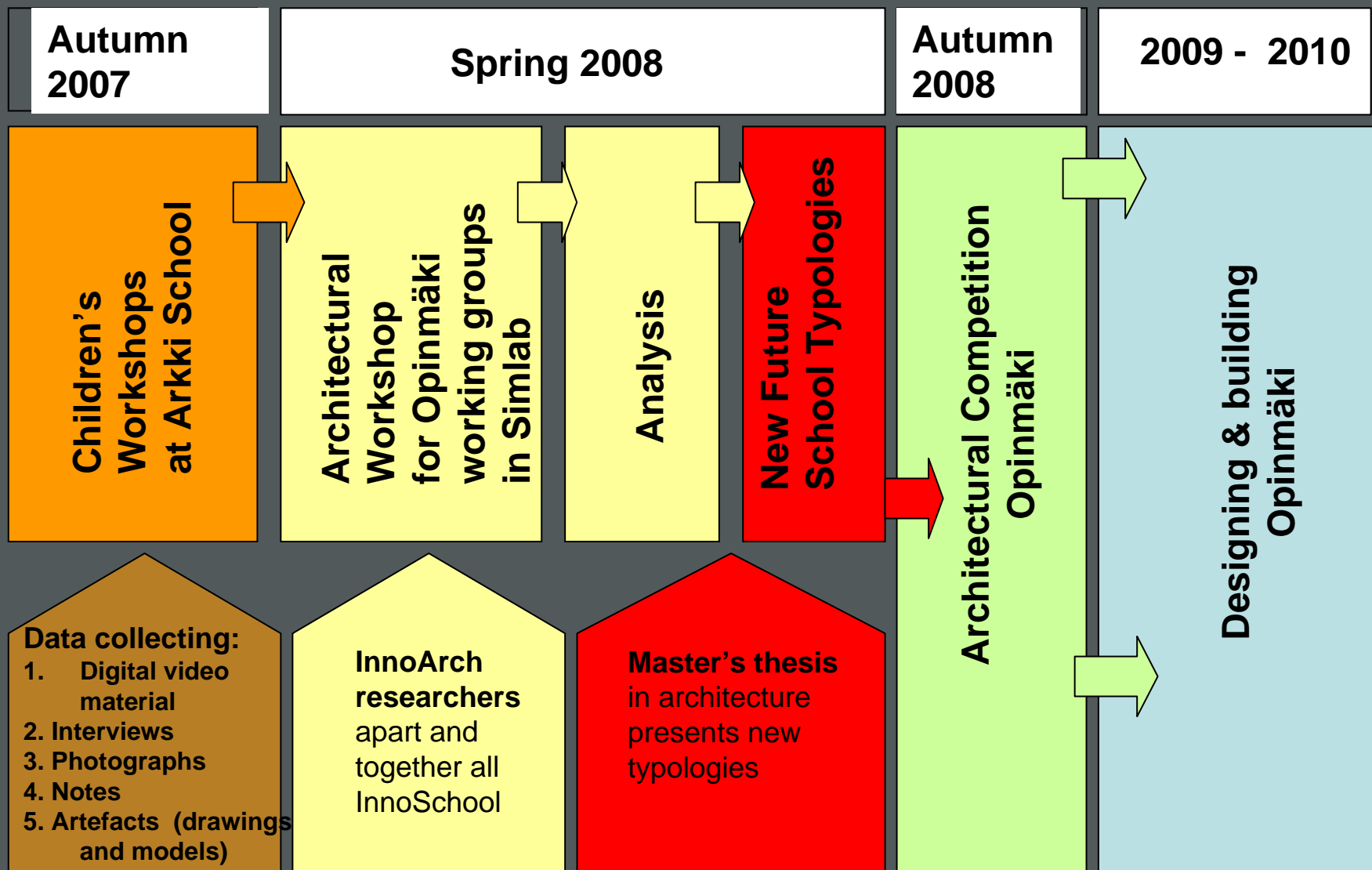




# Pilot Case Opinmäki



**City of Espoo  
Suurpelto**

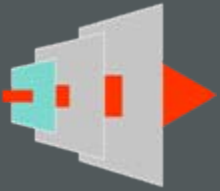


*InnoArch as a co-developer in the Opinmäki architectural design process*



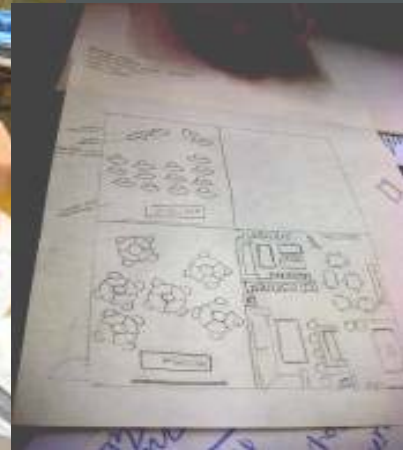
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## Arkki workshops in autumn 2007

- Children & youth in ages 11-18 working together / Documented in photographs and video tapes;
- 18 workshops and closing seminar
- Arkki= Architectural School for Children and Youth
- Architecture is part of the visual arts education in Finland at the comprehensive school in Finland







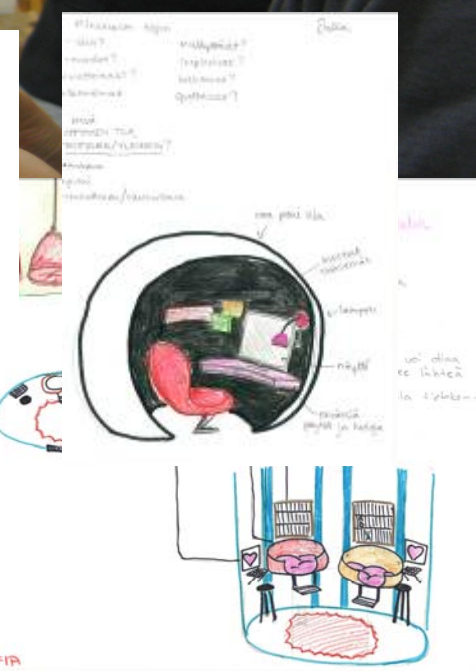
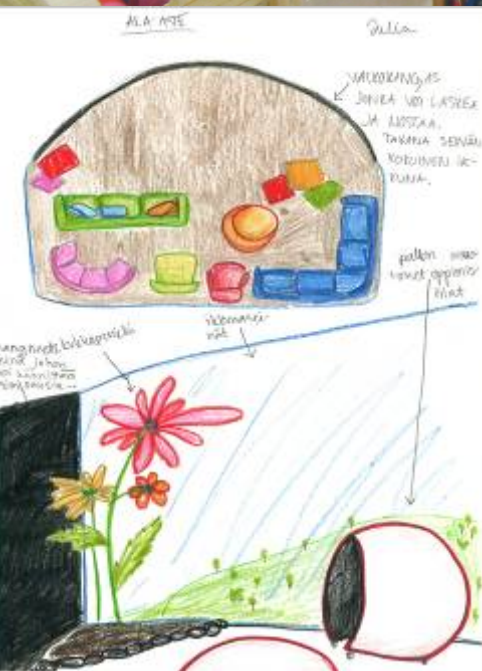








Meetings	Date/ Dates	Topics	Preliminary observations
1. workshop	26.9.2007	1. What should be changed at school?	More fun, new technology and beauty. More day light. More windows.
		2. A nice place	A café, a round places, sofas and soft chairs
2. workshop	2.10. & 3.10.	Future space (own) to work and learn (1)	PCs, smart boards, screens. Round shapes, transparent walls and cupolas, roof like the sky, green nature and bright colours, futuristic shapes in the furniture, ball-shaped chairs, sofas; separate moveable spaces, learning modules also outside.
3. workshop	23.10. & 24.10.	Common places at Future School	Halls, corridors, lunch rooms, great (festival) halls, jumping halls. Open doors and walls, glass walls, windows.

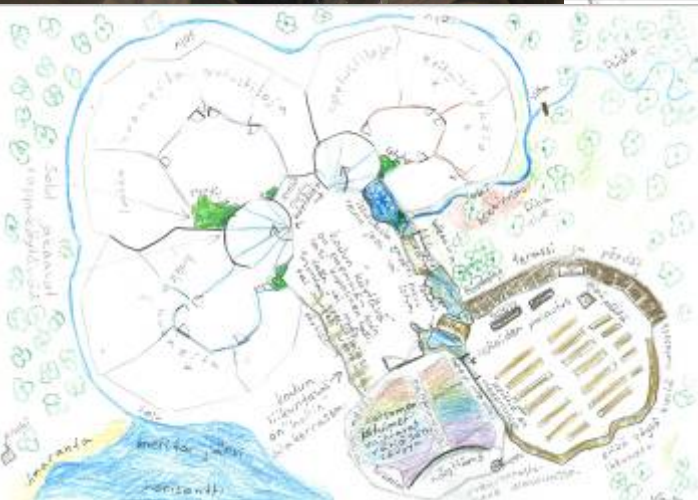
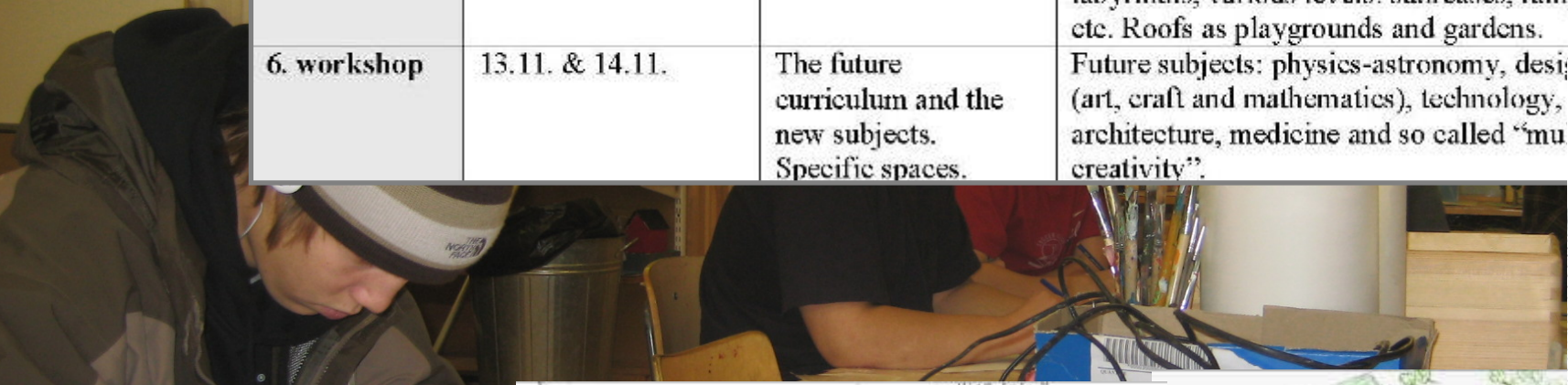








4. workshop	30.10. & 31.10.	Meeting points and routes	Entrance and centre halls and all the other big halls like for physical education and feasts. Currents of people.
5. workshop	6.11. & 7.11	The outside environment of the school	Students were longing after nature: and works of art. Places to stay were cosy and peaceful, bordered by green belts. Many seats. Water in many different elements: ponds, rivers with bridges, falling waters. Plants to see and eat. Different surfaces, different materials, labyrinths, various levels: staircases, ramps etc. Roofs as playgrounds and gardens.
6. workshop	13.11. & 14.11.	The future curriculum and the new subjects. Specific spaces.	Future subjects: physics-astronomy, design (art, craft and mathematics), technology, architecture, medicine and so called "multidisciplinary creativity".

















10. workshop

11.12. & 12.12,

modelling the school house. Photographing the models.

Stairs like Guggenheim's, rhythm like Reima Pietilä's. A lot of greenery and water. Pilotism. Bridges between houses on pillars. Multi-shaped buildings. Houses resembling rocky stones. Many interesting roof windows. Steps with lawn. Shelters and sun awnings. Round buildings divided in sectors etc.

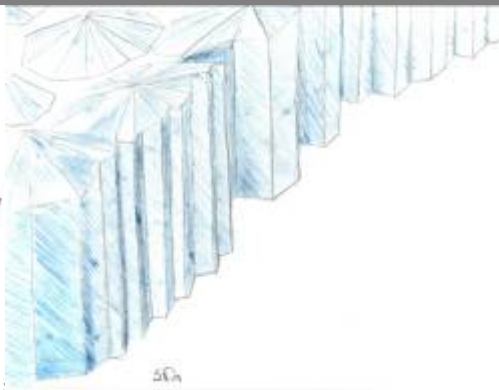
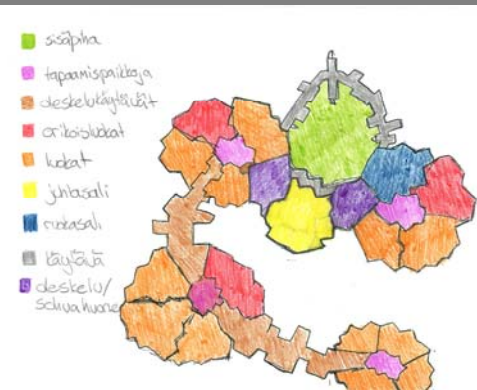
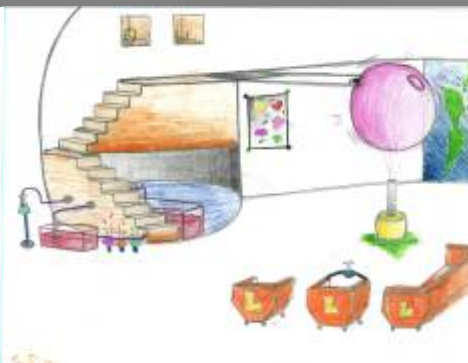
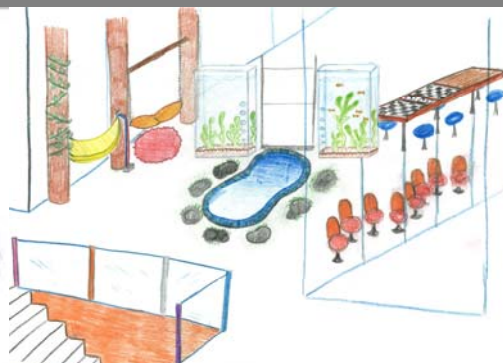
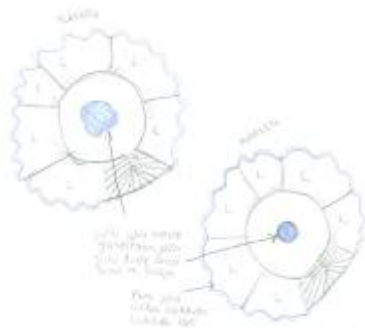
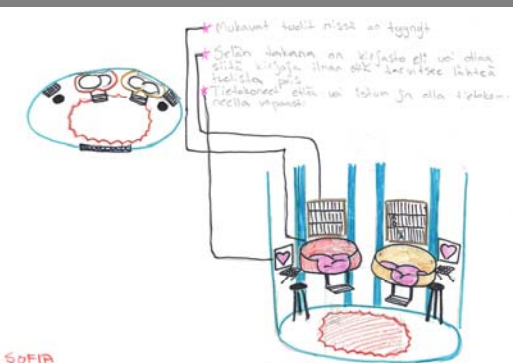
Seminar at  
Arkki School

Discussion about all  
topics and creations  
together with parents

A huge amount of fantastic drawings and models. The overall picture was cleared up to, when everything was repeated and analysed together. The students (pupils) had again opportunity to explain their solutions to the audience.



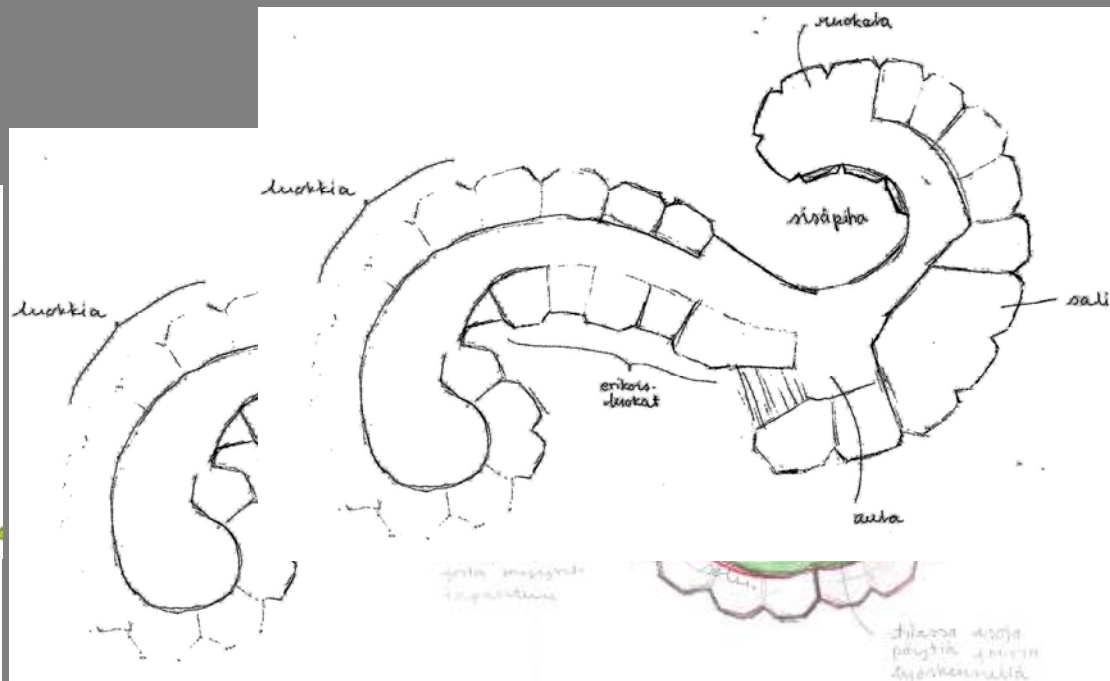
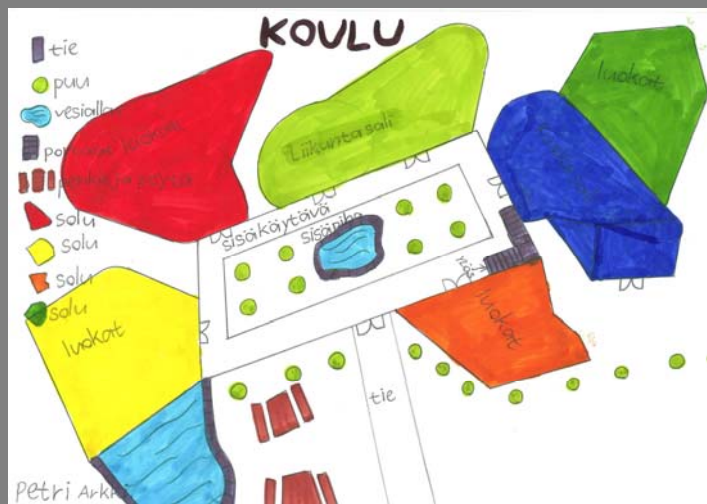
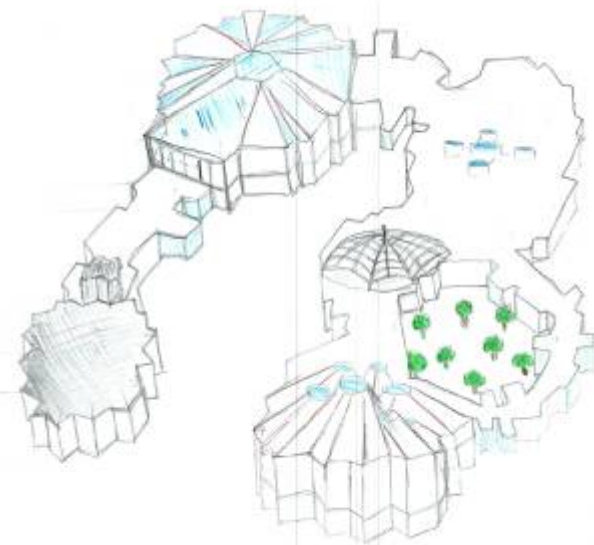
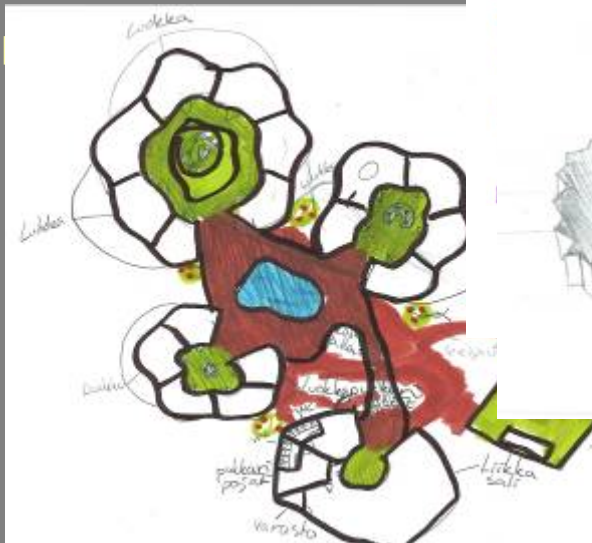


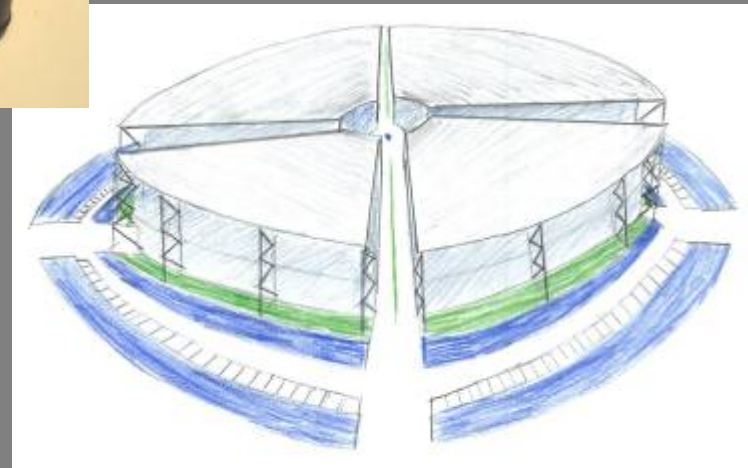
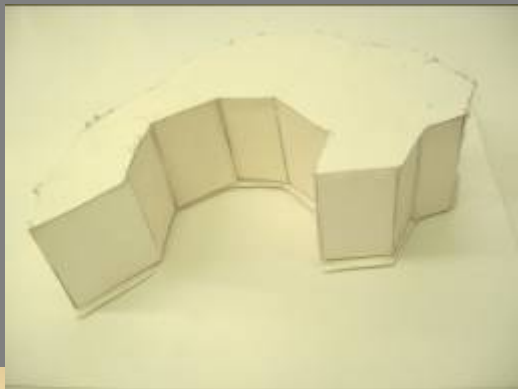
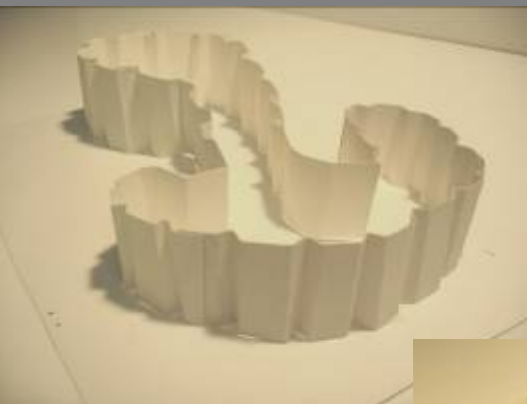




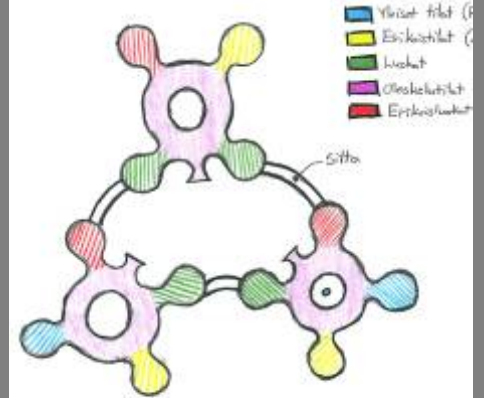
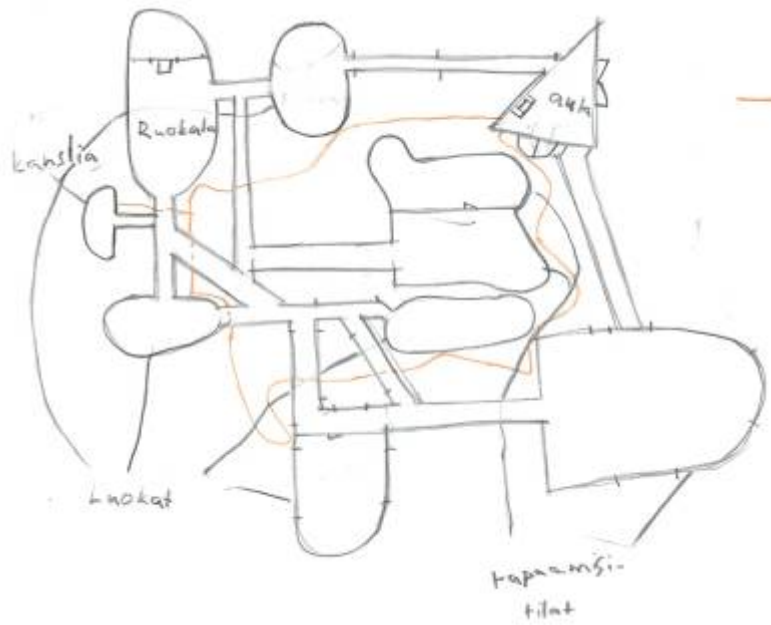
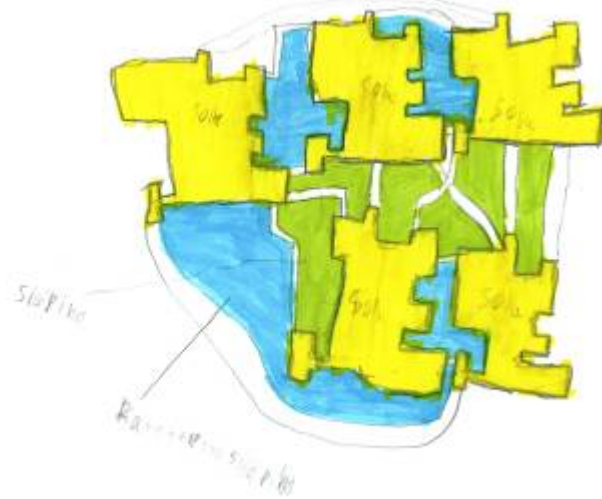


## “



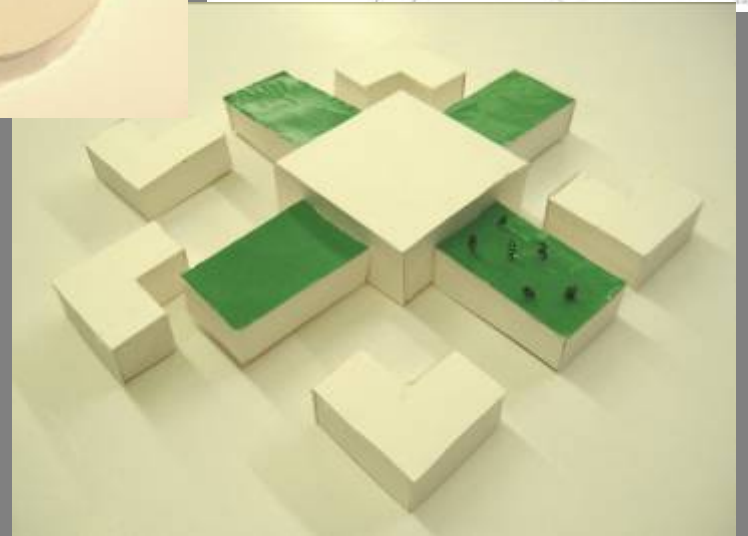
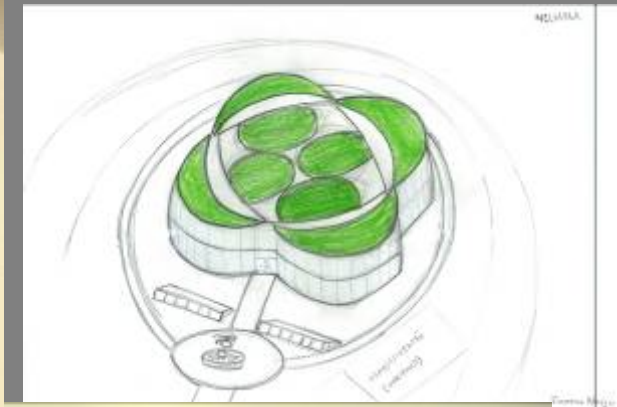
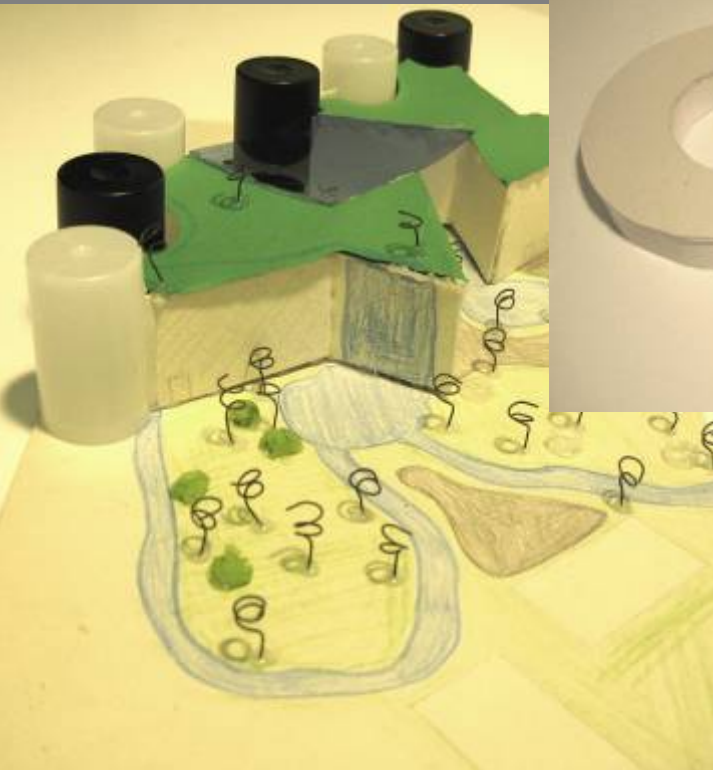


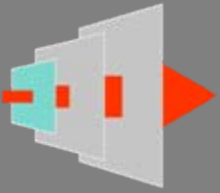
## "Clusters and bridges"(b)





## "Roof garden/ court yard as roof" (c)





# "New School Typologies"

**Master Thesis in Architecture,  
Sini Meskanen May 2008**



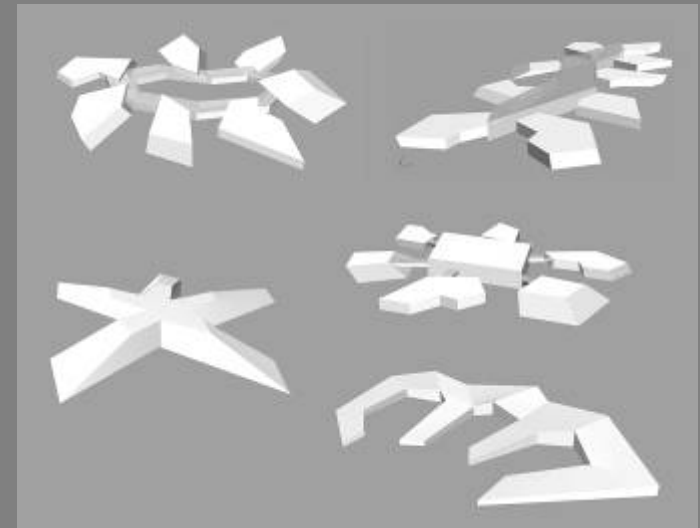
"Piazza"

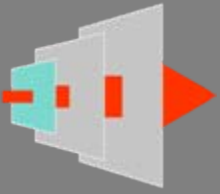
"Stoa"

"Serial Atriums"

"Roof Garden"

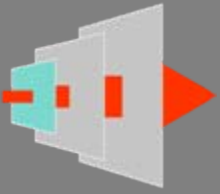
"Heart, bridge and  
clusters"





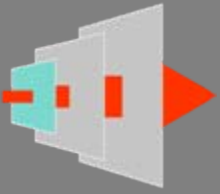
# Participation

- Participation in the planning and design process: In Finland citizens' participation in urban planning processes is defined in the Land Use and Building Act implemented in 2000
- "3Ps" - *provision, protection and participation* - included in the UN Convention on the Rights of the Child - and participation is the least recognised of the "3Ps" (Horelli 1997)



# Children acting

- **Childhood is social category not merely a transition phase towards adults life (Alparena & Rissotto 2001)**
- **Children and youth have right to participate in planning and design of their own environment**
- **Children as users of the school house -User's point of view in the design of the school house (places & spaces)**

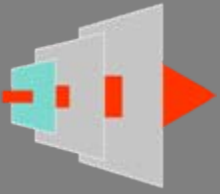


# Workshop method

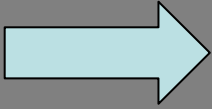
- Collaborative workshops as a method to collect data of children's ideas and opinions
- Collaborative workshops as a method for educate children to know and use their rights
- Arkki Workshops as "a boundary object"
- 





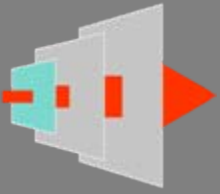


# Arkki Workshops as "a boundary object"



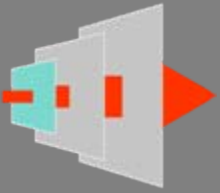
- Participation represents an important strategy in sustainable development.
- City Council of Espoo wants to make clear that also children's voice will be heard
- The preliminary results of Arkki workshops (and other InnoArch research) has been presented for Opinmäki Planning & working group (The New School as a center of the new neighbourhood)





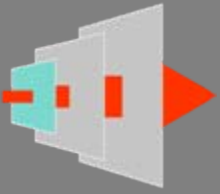
# Use of Video Analysis

- 1) ***Video taping*** useful “in making notes” when children described their ideas and drawings for the future school.
- This would not have been possible by analyzing only the pictures students created.
- The possibility of documenting their speech, of listening to their intentions and explanations, and of reviewing this material several times in different groups, has turned out to be fruitful.



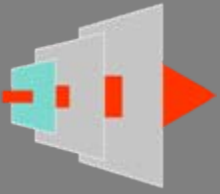
# Use of Video Analysis:

- 2) The TSL (teaching studying learning) method used at Arkki School and generally in Finnish architectural and environmental education for children has its ground in “learning by doing” (John Dewey) and also experiential and reflecting learning, as well (see also Kolb 1984).
- Hence it was extremely important to give each student a chance to present his/her own work; while explaining they also learned to clear their thinking and to know their rights as members of society. This is very important when raising children’s epistemic agency



## Further Aims and Next Phase

- *"The city as a school and the school like a city"*
- Local Internet Forums as mediators between the School and Neighbourhood
- International collaboration
- Collaboration, mediation and sustainability guiding the planning process of the school
- Learning Trails in the environment



## Further Aims and Next Phase

- A learning neighbourhood
- is a flexible concept outlining the key spatial elements of a neighbourhood that supports both life-wide and lifelong learning. The research will produce a pilot study for a neighbourhood where different formal and informal places for learning have an essential role in shaping the image of the place and supporting its residents and other actors in the aforementioned pursuits.

*Thank You!*

# Places and Spaces for Learning

**Teräväinen, H, Dr.Sc. (Tech) & Staffans, A., Dr.Sc. (Tech)**  
**Department of Architecture, Helsinki University of Technology**  
**helena.teravainen(at)tkk.fi, aija.staffans(at)tkk.fi**



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