



***School gardens in Denmark – organization and effects of the Gardens for Bellies school garden program 2014-2016***

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# Gardens for Bellies - Background

- Haver til Maver est. 2006
- Since 2014, 20 small and large-scale school gardens started
- A gastronomic school garden concept: outdoor cooking, food growing and nature education.





# Research focus

## Process

- Organizational set-ups

Effects on children's learning

Foto: Dyg, P.M.  
Haver til Maver, Tommerup





# Research methods



## Explorative case study research

- Qualitative methods
- Literature reviews: 1. Identity+ social competencies. 2. Learning
- Survey of parents

Methods	Number
Interviews – garden educators	8
Interviews – teachers	14
Interviews – decision-makers and project staff	9
Focus group interviews - children	5 focus group interviews x 6 children per interview (+ individual interviews with special needs children)
Observations – garden activities	9
Observations – competence development/network workshops	4



*Photo: Dyg, P. Haver til  
Maver, Gribskov, Denmark*





# The five cases

## Central school gardens

Name	Geographical location	Initiators
1. Gentofte	Urban, castle garden	Municipality, Department of Parks and Castles
2. Gribskov	Rural, private farm	Private farmer and chef
3. Aarhus	Urban, nature centre, agricultural school and playground	Municipality

## School- and community-based gardens

Name	Geographical location	Initiators
4. Assens	Rural, located on vacant spaces near schools	Local garden expert and school boards/heads and teachers
5. Roskilde	Semi-rural located on school grounds	Teacher and school board



# Children's self-reported learning and attitudes

- To grow their own vegetables:
  - process from seed to table
- Nature's cycle: Pollination, fertilisation, decomposition etc.
- Varieties of vegetables, plants and insects
- Cooking and taste
- *Learning is fun!*

## Links to subjects and food literacy:

- **Science, Maths, Danish, home economics**
- Action competence,
- Healthy diets and living
- Inter-connectedness
- Sustainable living

*"My boy, he usually does not tell anything about the school. Every time he comes home from Gardens for Bellies, he has something to tell."*

*Photo: Jensen, K. Gardens for Bellies Denmark*

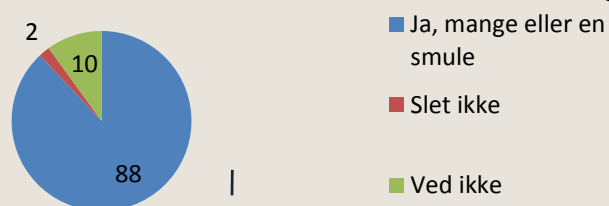
*"He can tell us what he has learned and remembers it - it's not often that he can do this with school"*

# Life skills, wellbeing and social relations

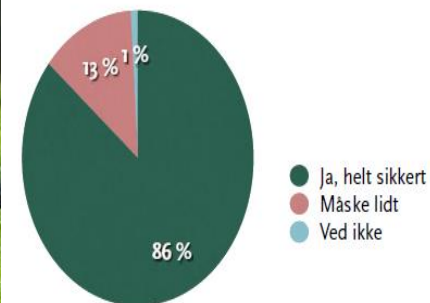
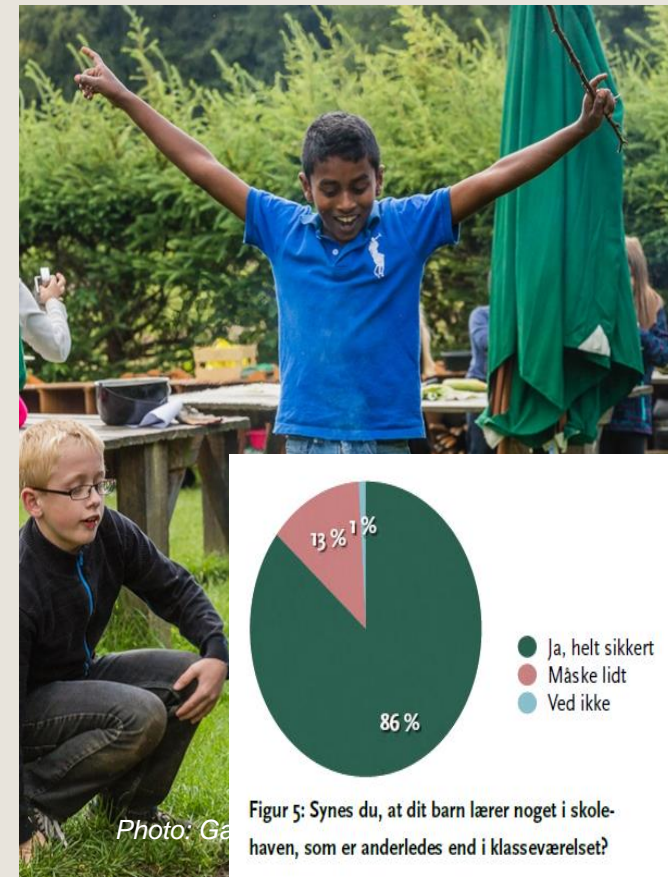
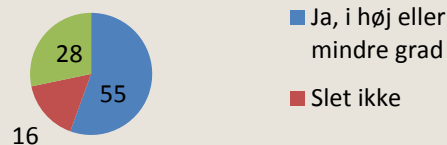
- Teaches children confidence and gives them successes
- Supports social relations and wellbeing

*"I feel like I get bullied a lot at school. But when I am over there, there is hardly anyone bullying me. It's as if, well as if, they have never ever bullied me over there. It never happens. They let me in and let me participate. That doesn't happen much here at school." (5th grade boy)*

Figur 12 Has your child's participation in the school garden given her/him successes?



Figur 11: Have you noticed whether or not the participation in GfB has had a positive influence on your child's wellbeing?



Figur 5: Synes du, at dit barn lærer noget i skolehaven, som er anderledes end i klasseværelset?



# The central school gardens



- Learning about and connecting with nature.
- Taste development
- Chefs, farmers and nature guides create excitement around learning
- Appreciative pedagogy emphasizing children's successes
- Children more motivated to learn



# School- and community-based gardens

- Stronger synergy between garden and classroom
- Teachers see numerous opportunities to teach science, home economics, languages, math, arts and other subjects
- A place for contemplation, stress-relief and physical activity
- Children are more motivated to learn

*"It's a wonderful 'classroom' out here. You can use it for any subject. So I don't think it's hard to use the garden." (Teacher, lower grades)*



# Political agendas in school garden programs



Foto: Haver til Maver, Tommer



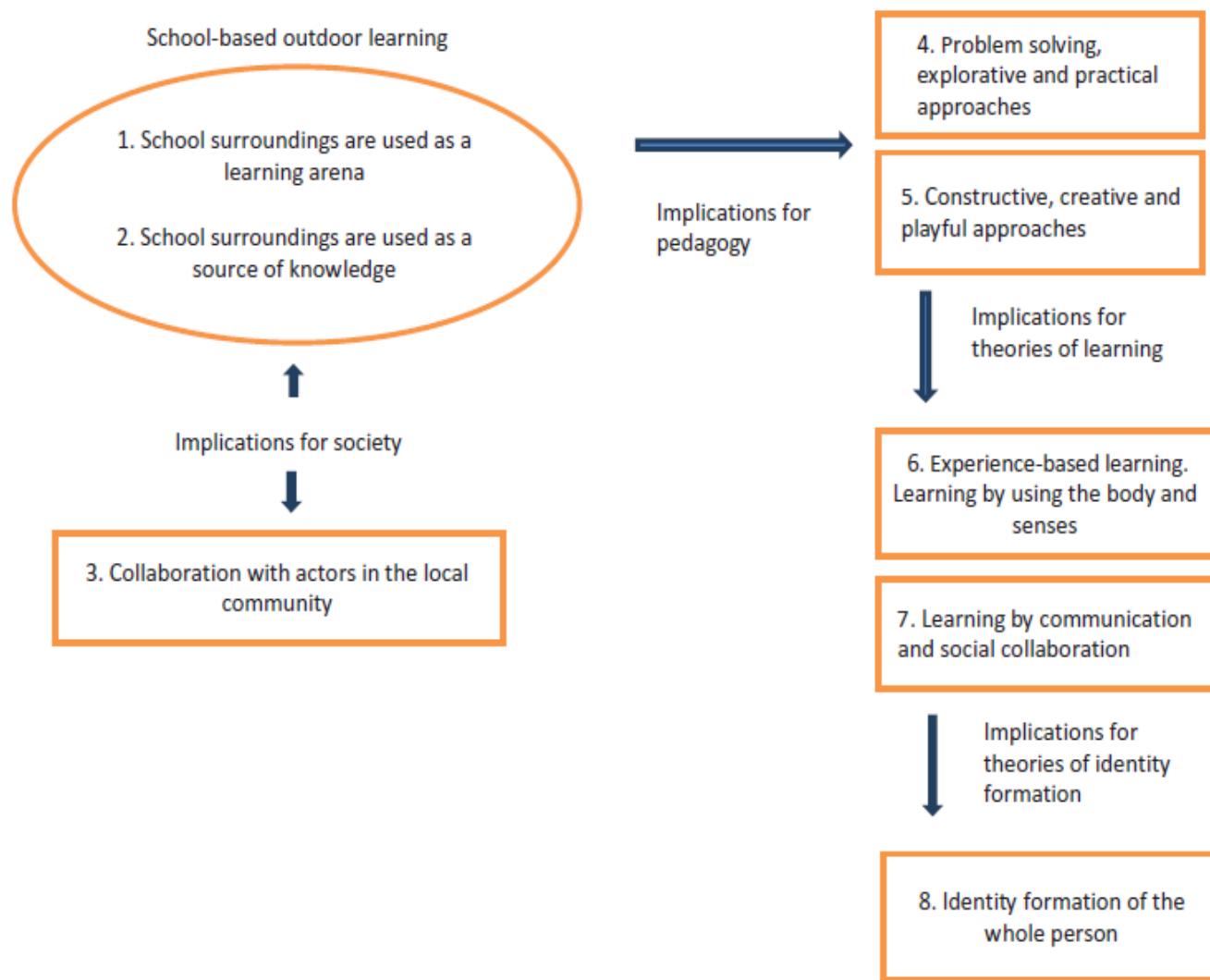
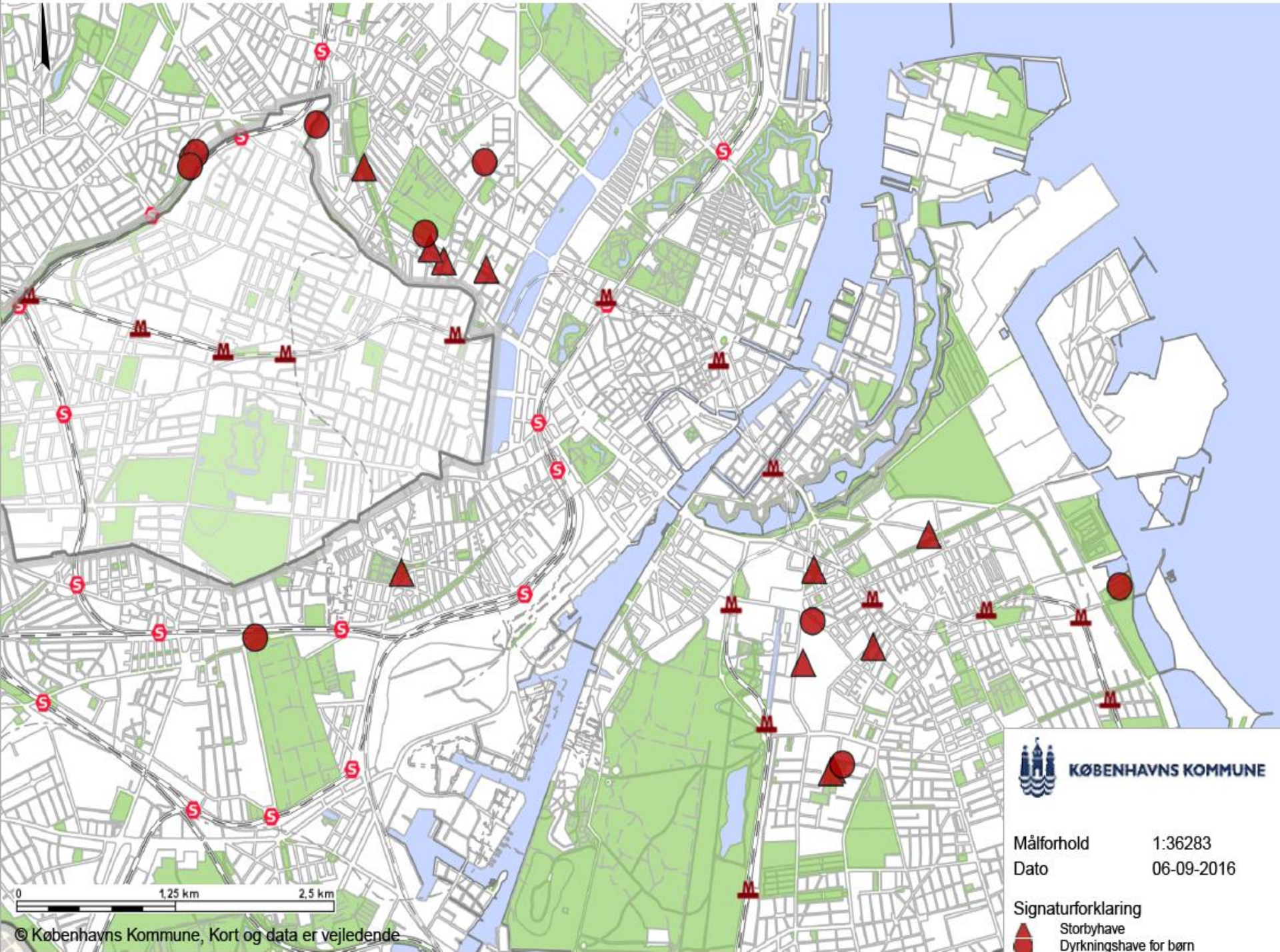


Figure 1. A model of characteristics of school-based outdoor learning

Source: Translated from Jordet (2010, pp. 34–35)







Thank you for  
listening

*Photo: P. M. Dyg,  
Gardens for Bellies,  
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