



## INTERACTIVE WALKABLE FLOOR MAPS (IWFs)

Focus, facilitate and improve the dialogue in municipalities between politicians, urban planners and citizens – children and youth inclusive

### Background

The dynamic IWF approach is part of REGREEN, a EU H2020 funded project on fostering Nature-Based Solutions (NBS) in urban areas in Europe and China.

Developing IWFs in REGREEN through exchange of perspectives between scholars and practitioners.

#### The joint idea of IWF:

- Working with geographic mapping, governance, education, children and nature, and urban planning;
- A new tool for democratic and integrated, experiential governance as well as for education and awareness raising among children;
- Aim: scaffolding transitions towards adoption of NBS in cities.



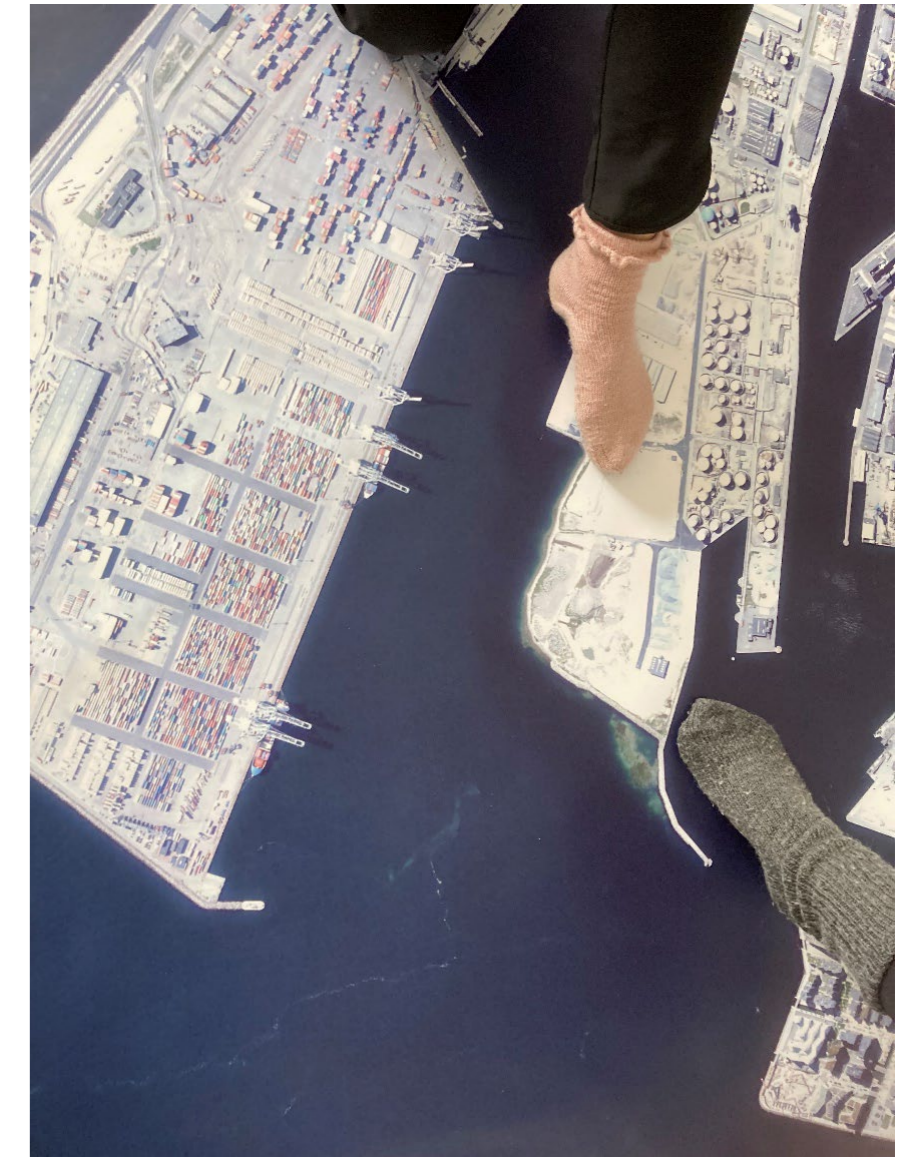
Children interacting with the IWF © Jeppe Læssøe

### What are IWFs?

- Huge pre-processed remote sensing imageries (e.g. 4x7 meters) covering a municipality/selected areas at defined high-resolution scales;
- move urban representation from static to dynamics: mapping overlaid by GIS information, QR codes, transparencies, photo elicitation, etc.;
- highly flexible to enhance the spirit of a dynamic product;
- printed in high quality on a robust material, strong enough to be walked on.

#### Interactive in a triple sense:

1. Designed in collaboration with the users and flexible for user needs;
2. a meeting point for groups of people (decision makers, stakeholders, citizens, policy makers, children) to discuss current urban policy and planning issues or explore and learn more about their place and area and NBS;
3. used for participatory mapping: Participants can add suggestion on what to display on transparencies, comment on speech bubbles, add notes, narratives or images or add QR codes linking to larger contributions.



Pointing at project issues to discuss © Sally Andersen

## DESIGN – From Static to Dynamic

### GOVERNANCE - Experiential learning in policy for Nature-Based Solutions: policy workshop process & governance characteristics

- What kinds of policy learning around NBS are occurring in our case studies and who is involved in the learning (e.g. government staff; other professionals; citizens)?
- How might governance characteristics and the experiential workshop process influence policy learning?

#### How do IWFs support processes of NBS policy learning?

Integrating NBS into mainstream policy and implementing NBS measures often entails policy learning on behalf of policy makers and practitioners: involving learning about new ideas, techniques and ways of working, and novel strategic policy formation.



Policy Workshop in Paris, 2022 © Carolyn Petersen

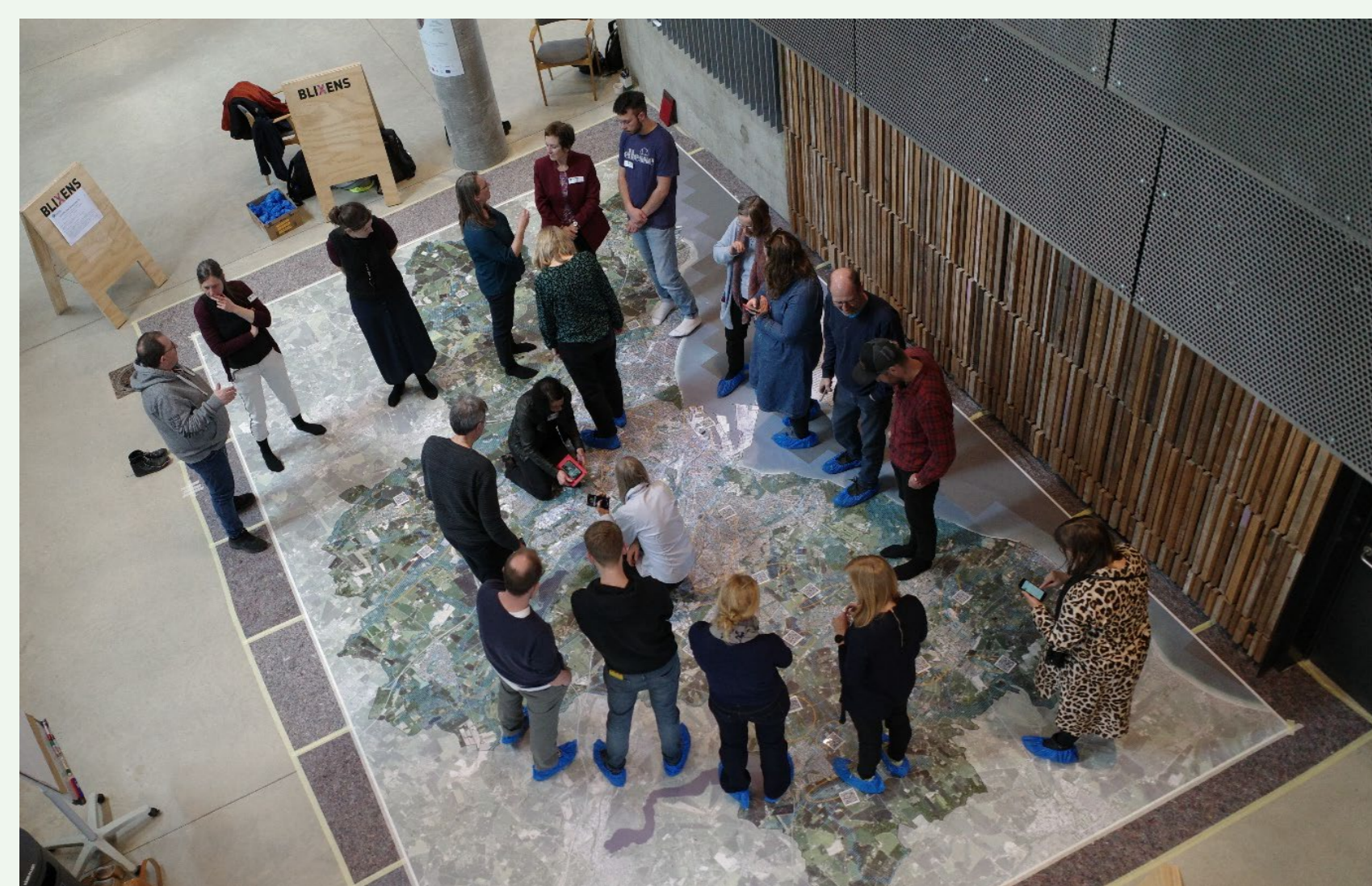
### Method - Policy learning workshop using IWFs

Participants were asked to:

- describe and critique the current situation of NBS implementation, including barriers and governance aspects;
- imagine what their preferred future NBS implementation could look like without the current constraints;
- explore the obstacles and constraints involved as well as ways of getting to that situation.

### Conclusions

- IWFs provide opportunities for dialogue and social interaction (involving experts, stakeholders and local citizens): all the types of policy learning can occur, but especially where this involves thinking outside of current limitations (e.g. talking about future visions).
- IWFs stimulate social learning in workshops, create a group learning experience (where the group could move around the map and discuss / focus on different sites).
- IWFs enable learning to be contextualised in the local setting, leading to discussions about broader approaches.



Stakeholders and scientists on floor map in Aarhus, 2022 © Wanben Wu

### EDUCATION - The pedagogical schools learning objectives are to scaffold pupil's:

- development of knowledge on urban environmental problems,
- understanding of holistic, sustainable, nature based solutions,
- action competence related to engagement and
- participation in urban sustainable development.

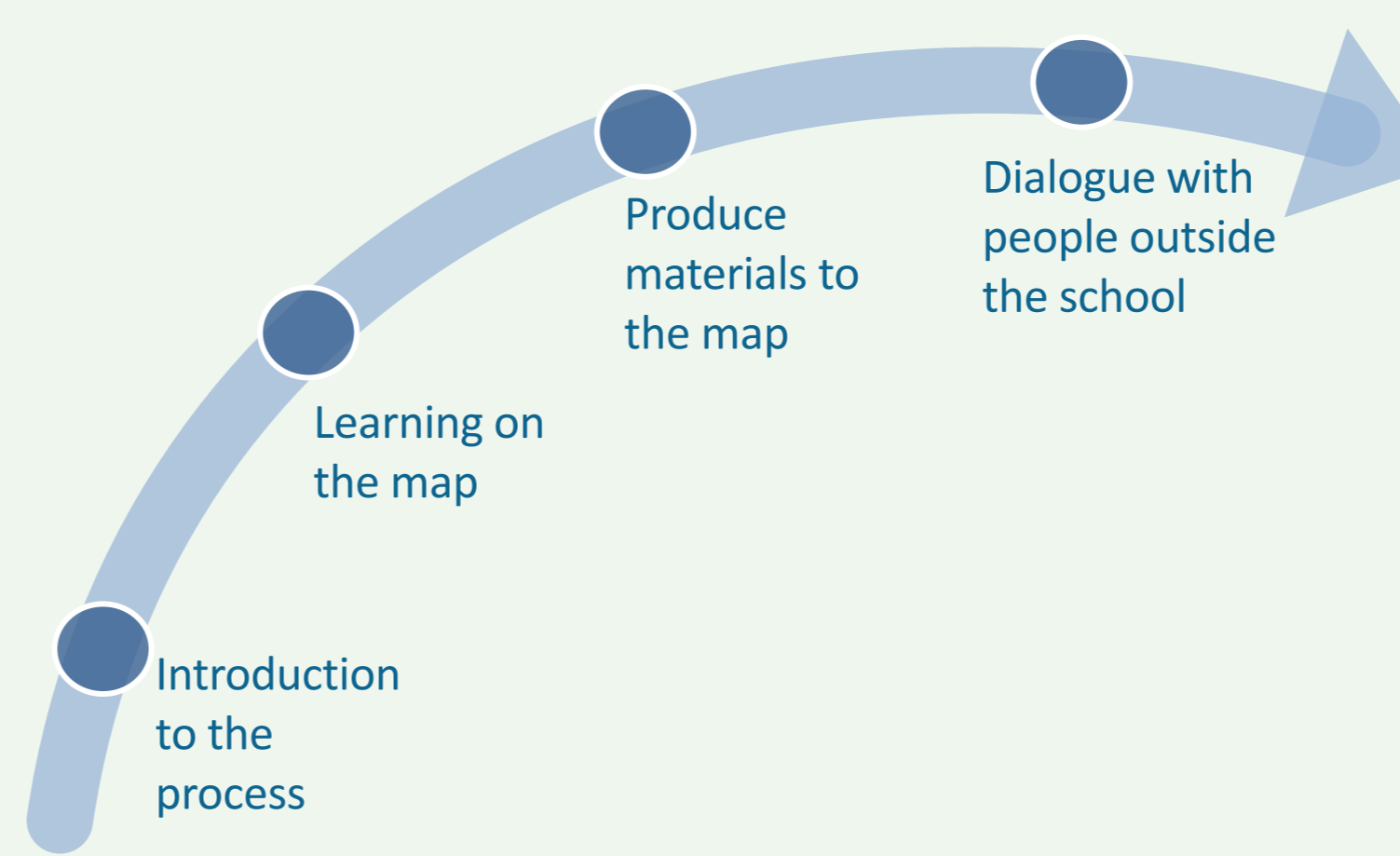


Fig. 1: Four phases of the teaching process

#### Ideal use of IWF in teaching:

1. Learning about the local area by walking on it and see what is highlighted;
2. Using QR codes to read and learn about the municipality's NBS projects and plans;
3. Selecting and studying a topic, both in a concrete way and by exploring it in a larger context;
4. Working critically and in constructive way with assessment and suggestions for actions – own, others, the municipality's.
5. Working with communication of insights and assessments to be published at the IWF;
6. Meeting key persons on the map and learning by knowledge exchange and discussion;
7. Reflecting experiences and considering further studies and actions.

### Interactive R&D project with schools

REGREEN has been collaborating with six schools in three European countries on generating ideas for application of IWF, identifying barriers and learn from experiments in practice.

#### Some preliminary findings:

1. IWF is a platform, which ideally opens for many different opportunities for learning about nature, urban areas and sustainable development;
2. School structures, national curricula demands, and lack of time are challenging barriers;
3. However, engaged teachers have applied the IWF in their teaching with the key lesson to start with small easy activities. For example:
  - One teacher started by letting the pupils explore the map and then he taught them on the IWF why their city and landscape is shaped as it is.
  - Two geography teachers asked their pupils to bike around in the city identifying where it is difficult to bike. Afterwards they added these places to the IWF.
  - Another teacher made a visionary project with 8 grade students, where they added their best sites in the city and their suggestions for improvements to the IWF by means of transparencies.
  - Children at other schools did also formulate wishes for improvements. And these wishes will be presented and discussed on the IWF with an urban planner from the city.
  - In another experiment, large transparencies were applied to draw copies of specific area. They are put on the IWF and pupils are adding stickers on nature, daily life, history etc.

### Contributors

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