

Sustainability at Elvebakken Makerspace

Élan - designing for Transformation





Contents

- Context
- Exploration process
- Prototypes
- Future steps





Élan

DIY



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Overheating



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Ethnologist



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Makerspace

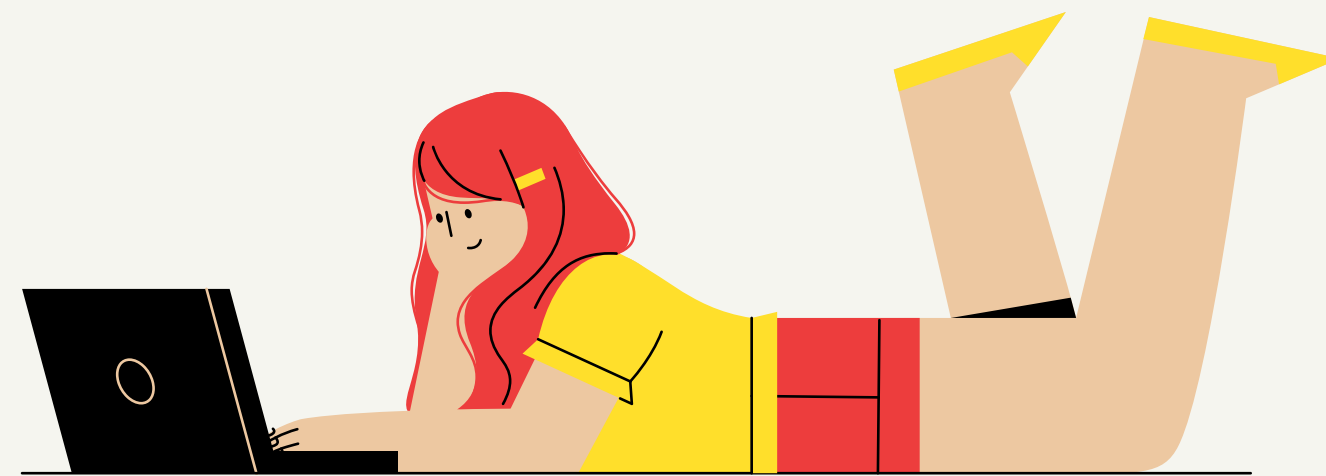




Exploring

Part 01





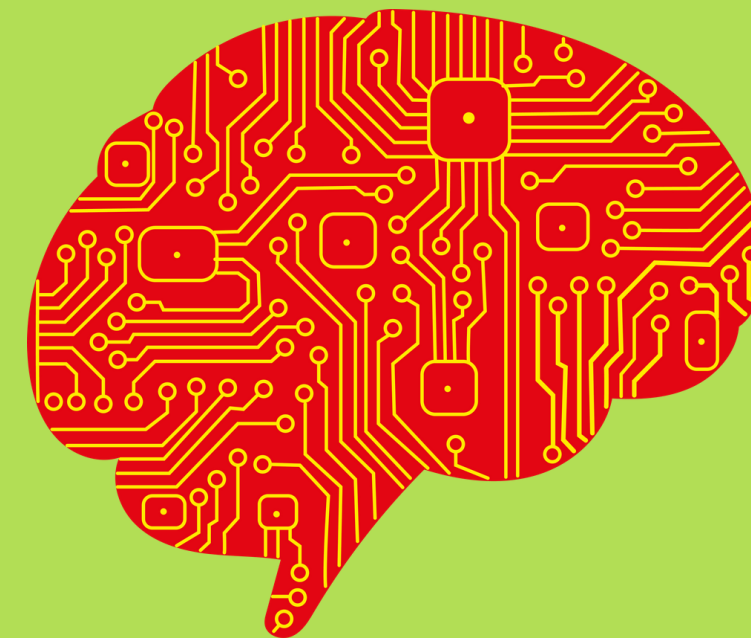
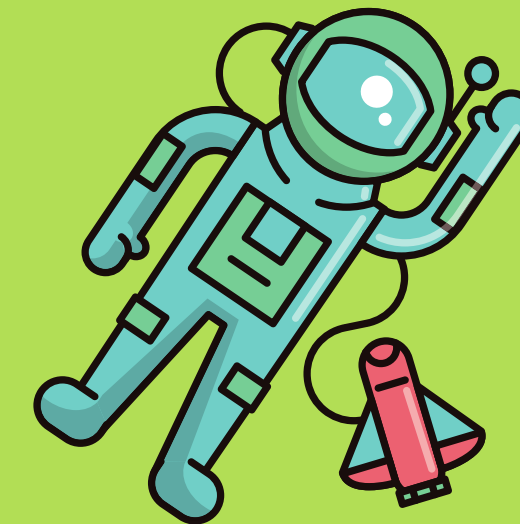
*Makerspaces are **community-based** workshops that enable people to **access technologies** and **cultivate skills** for design and fabrication, and to make things for themselves or with others in self-directed projects.*

Smith, 2017



What is a Makerspace?

- Frames inclusivity
- Diverse in goals
- **Elvebakken Makerspace**
 - Context
 - Interviews and takeaways





Objectives

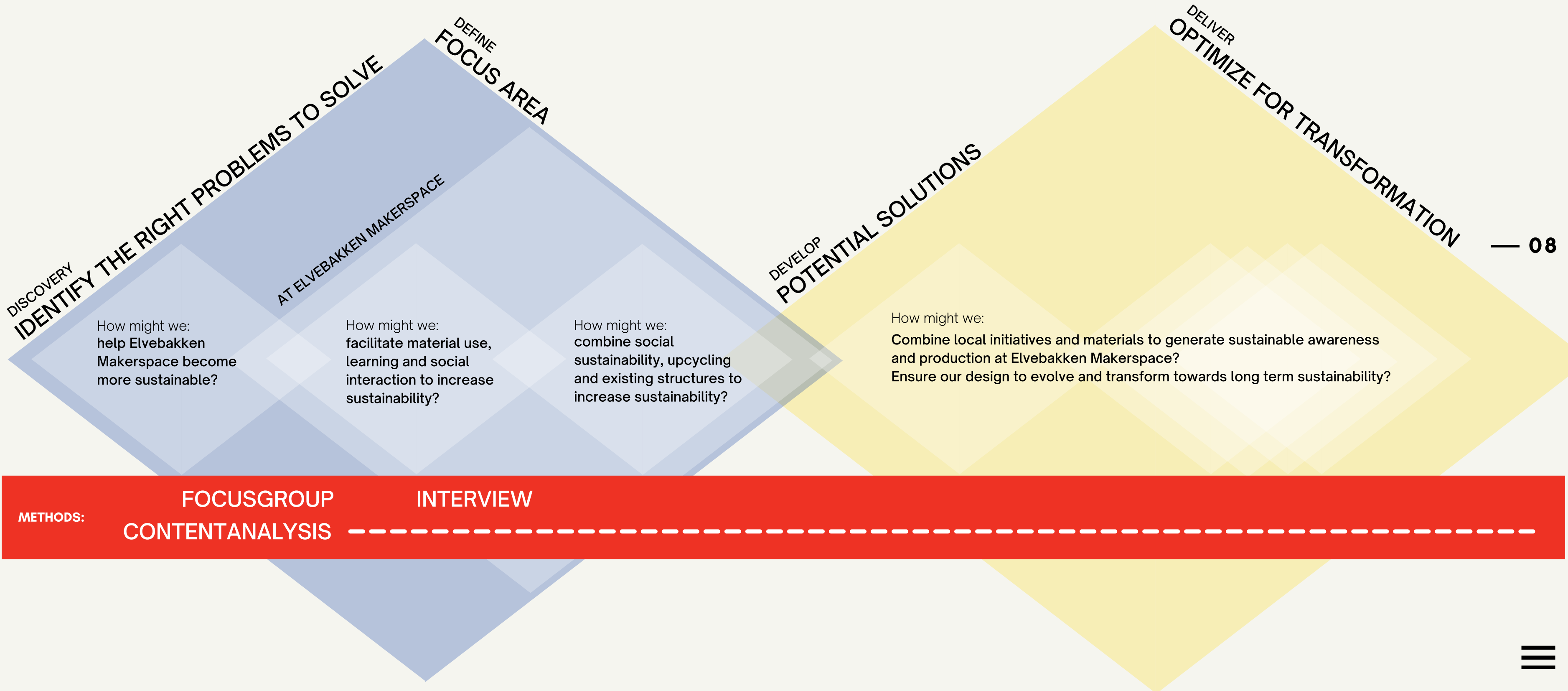
What we want to accomplish



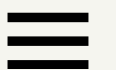
- Facilitate for principles of UN Sustainability goals at Elvebakken Makerspace
- Increase sustainable awareness at Elvebakken
- Facilitate for social interaction
- Frame benefits and outcomes of sustainable production
- Help Elvebakken become more attractive for;
 - students across multiple courses
 - local businesses
- Having established (at least at a partial level) cooperation with other actors outside the scope of Elvebakken



Sustainable Transformation Process



Sustainable Transformation Process





Prototypes

Part 02





Focus points

Key points derived
from our analysis
inspiring the
prototypes

Holism and every day life

Prototype 1 & 4

Education

Makerspace as a space for learning and inspiration

Prototype 2 & 3

Facilitation for sustainable choices

Prototype 1 & 3

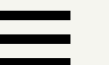
Social

Prototype 2 & 4

Sustainable usage and knowledge of

Materials

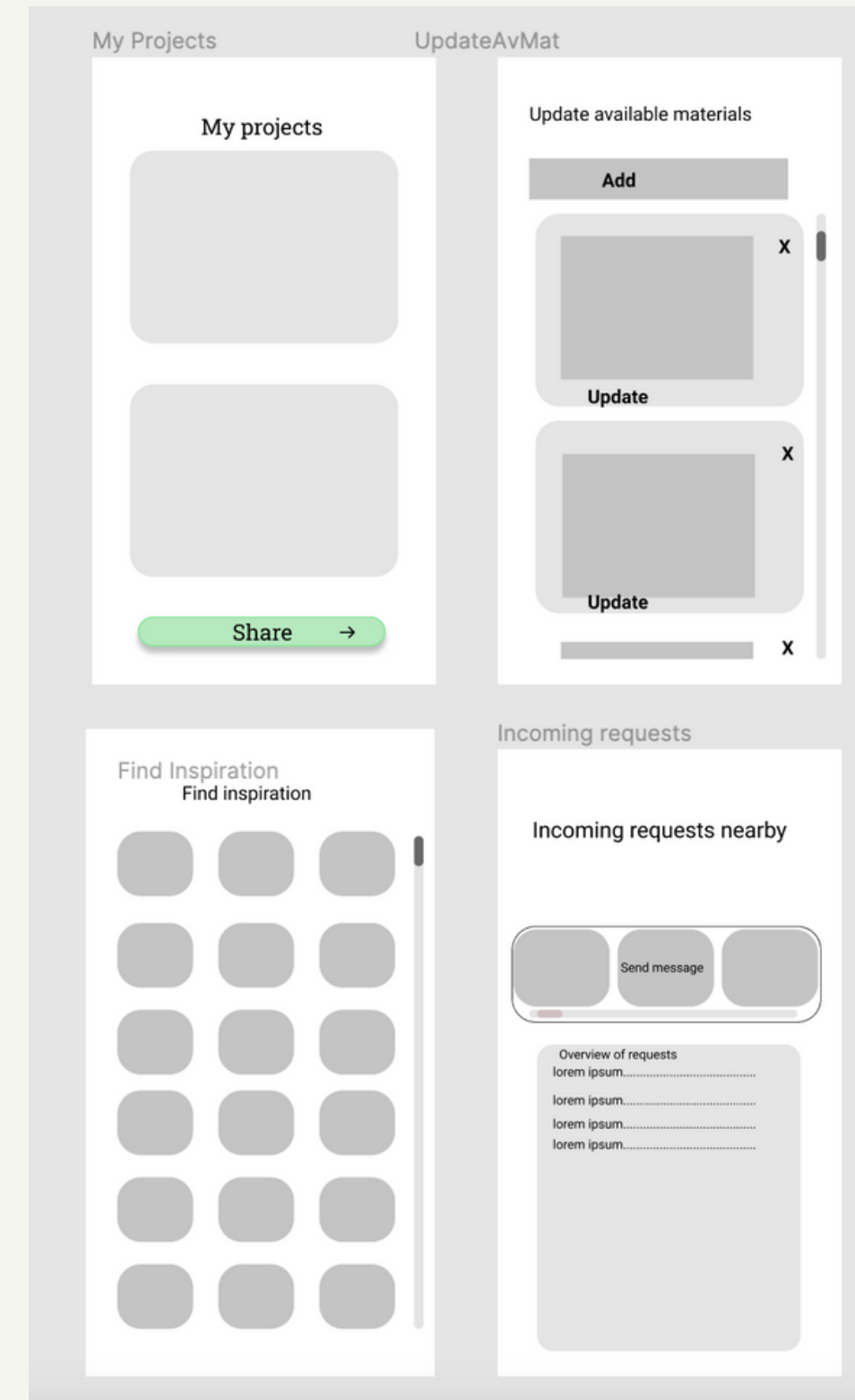
Prototype 3 & 4



Prototype 1



Prototype 2



Prototype 3: intro

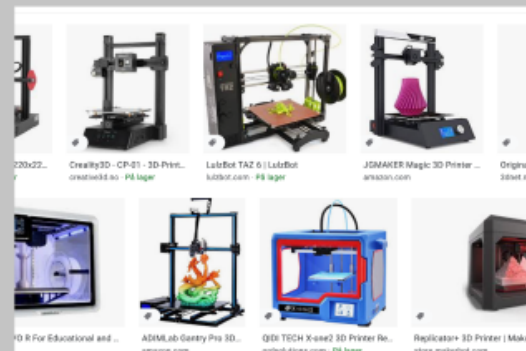
Prototype 3: Physical constraints

ELVEBAKKEN MAKERSPACE

Her er alle velkomne!

Info om maskinen!

fjknjhdlsznla lm
aslc lsac dlzm
clz, c,mzc ,dsz
czckzj cz,c
,mzxc ,x ,mxc,x
jccj c
jhsakhdjnfe scs
.kjcj sdx c
sjfn sdjkndkad
jjbd sn ma
kajsb ds



On materials.....

fjknjhdlsznla lm aslc lsac
dlzm clz, c,mzc ,dsz czckzj
cz,c ,mzxc ,x ,mxc,x jccj c
jhsakhdjnfe scs .kjcj sdx c
sjfn sdjkndkad jjbd sn ma
kajsb ds

Du kan eks. bruge denne maskine til:

-
-
-



Prototype 4: skærm

Prototype 4: Skærm

Text here: telling about materials Prototypeidé 4

What: Holism of production - the two ideas for *Material consciousness*

How: Screens giving information on the lifecycle of materials.

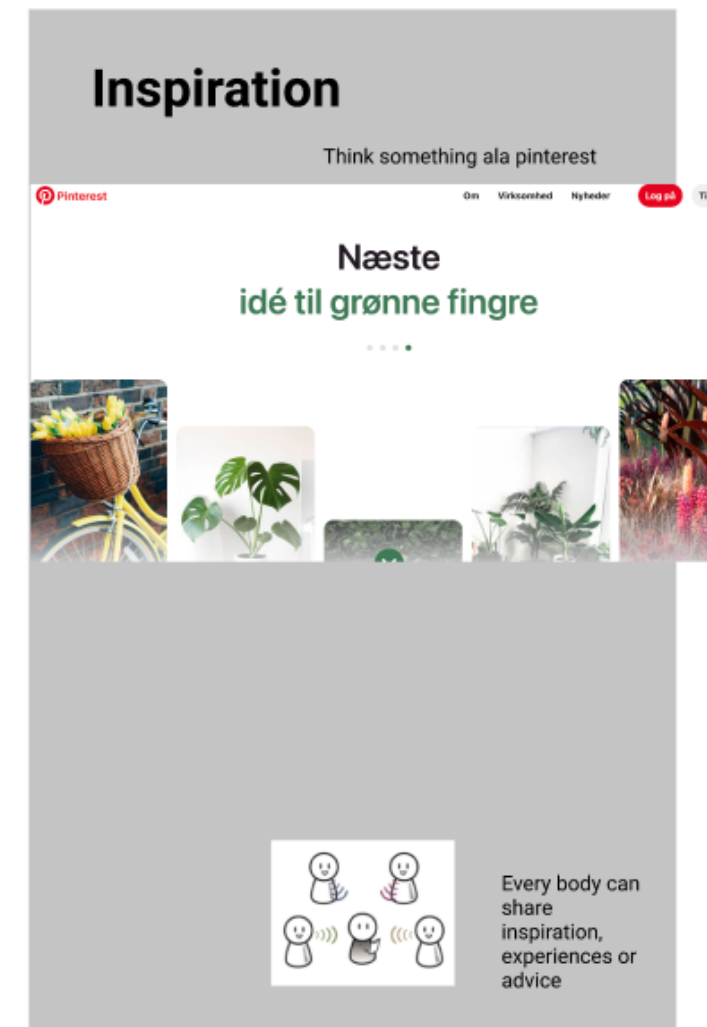
Opening for makers to share experiences with projects and materials.

Physically it could be on big screens, social platforms, boards?

- Are we acting as agents of change with this?
- What mindset does Proto4 feed into?
 - That makers should be enlightened about the cost of the materials.
- How does Proto4 enforce the "long now"?
 - By the assumption that knowledge helps change behaviour.

Could be combined with Proto6 - "Marcus" Material AI: your AI helper for guidance to machines, materials, choices and inspiration.**

BIG interactive touch screen



The journey of your materials



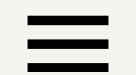
What can you do forward with the material?





Forward

Part 03





Future steps

Ensuring transformation

Tinkering collaboration

WORKSHOPS

Mindset and posture

CONTENT ANALYSIS

New ways of designing

FIELDWORK COMBINED





Workshops

Tinkering
collaboration w/
Tonkinwise

Probing

EARLY TESTING

Collaboration

VISIONS FOR STAGES OF TRANSFORMATION





Workshops

Students

On the ideas for transformation.
Insights on transformation
outcomes and applicable
solutions.

Goal: defining space for short term
change.

Third parties

Connecting to local industries and
businesses. Creating a space for
projects and solutions.

Goal: defining collaboration within
the local community.

Teachers

On longterm changes. Redefining
our design space. Creating
ownership.

Goal: concretize longterm
solution.





Content Analysis

Mindset and posture
w/ Irwin

Continous Openness

SURPLUS OF KNOWLEDGE

Our own values

ARGUMENTS FOR TRANSITION





Content analysis

Transformation

Research on youths and long term learning effects.

Sustainability

Research on successful sustainable innovation and their key factors.

Idea

Gain knowledge about materials and suitable and successful Makerspace projects.





Combined Fieldwork

w/ Lockdon & Candy

Backcasting

WHAT DO WE NEED FOR THIS TO HAPPEN

Experiential Futures

IN REAL LIFE





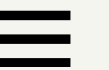
Fieldwork combined

Local solutions

Walk-about and discovery

Hands on

Fiddling with projects and
materials





Contact / help

We appreciate help - ideas - thoughts - critiques

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References

Smith, Adrian (2017). *Social Innovation, Democracy and Makerspaces*. SPRU Working Paper Series (SWPS), 2017-10: 1-18. ISSN 2057-6668. Available at: www.sussex.ac.uk/spru/swps2017-10

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