

co-create better realities!
can be reimagined to
factors like gender,
dynamics (shaped by
reflection on how those
We encourage the
others, and the planet.

Using the Low-tech
approach: the domi-
nant technical, and
social models

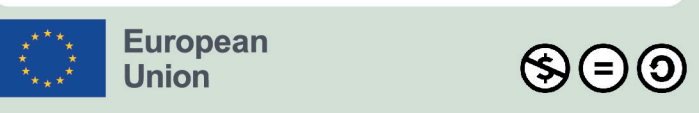
To do



This booklet is part of Low-Tech for Sustainability, a European project to develop course contents about Low-Tech. This project has received funding from the European Union - Erasmus + Strategic Partnership (KA203) 2021-1 agreement F R O 1 - K A 2 0 - H E D - 0 0 0 0 2 7 6 0 0

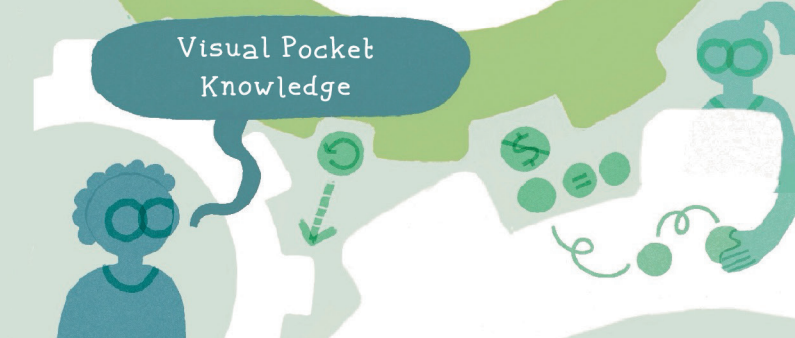
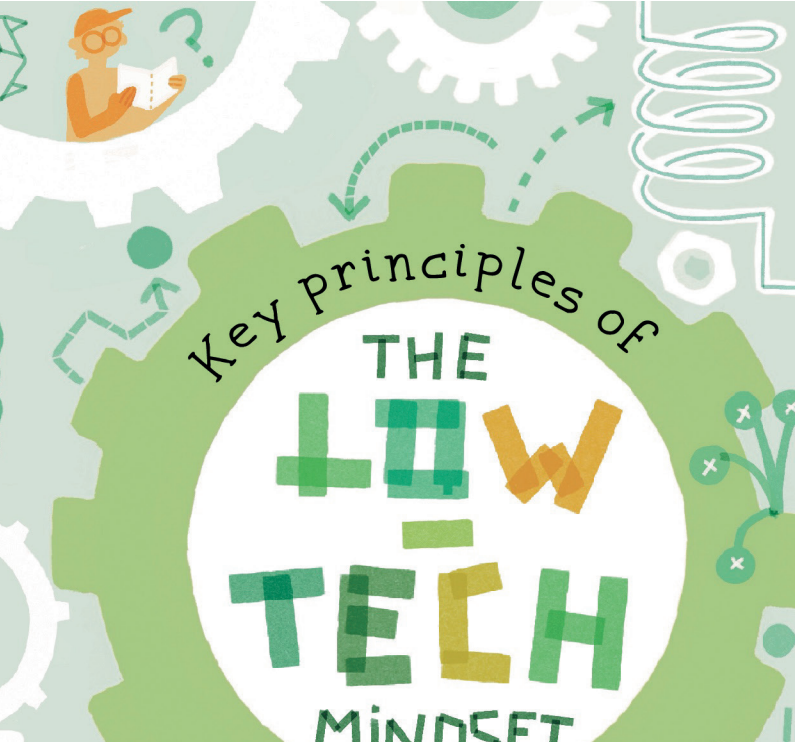
LT4sustain
<https://lt4sustain.eu/>

Designed by
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Here, we present: • 9 concepts for Low-Tech teaching
some hackathon tips & feedbacks
Visit <https://zenodo.org/communities/lt4sustain/> for more resources!

LOW-TECH
is an approach that reflects on such questions: It's about time we discuss it with everyone!
Industry and students



Putting it into practice: A LOW-TECH HACKATHON

PRE-HACKATHON

Sourcing the needs & partner network

The low-tech hackathon aims to co-create solutions to local needs, by training students and involving locals in the process.



Activities during the hackathon should be aligned with the participants' competences and profiles previously established according to the objectives defined.



Teams are formed making sure there is a balance in gender, academic background and languages spoken.



The hackathon model has lots of advantages as a pedagogical tool but can be questioned regarding its short duration opposed to the long-lasting changes it tries to engage.

Plus, it can bring a competitive atmosphere between the teams, which we would like to transform into a cooperative atmosphere.

A key is to reveal the 'territoire's needs' by meeting local actors, conducting interviews and analyzing the data. This enables us to generate a list of topics (ie.: energy, transportation, culture, food, housing...), to propose as a guiding structure for the generation of solutions.



Building a network of local partners is essential to promote trust and spark collaborations for generating activities, sharing spaces (workshop) and materials (ressourcerie).

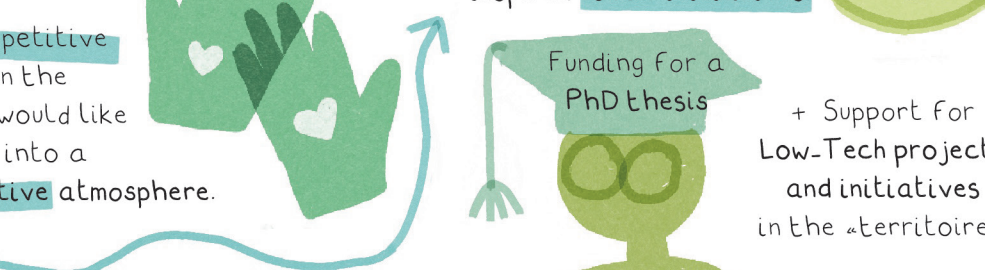
HACKATHON ACTIVITIES

Activities should be varied in duration and complexity.



FOLLOW-UPS FEEDBACKS

Based on our experience with the European Hackathon, we received excellent feedback from participants and observers. It also inspired local initiatives:



Are we building a sustainable and desirable future for everyone?

Our planet faces unprecedented socio-ecological challenges. The choices we make now will shape our ability to secure well-being within planetary boundaries.

Low-Tech offers practical, responsible solutions that meet real needs.

Let's examine socio-ecological challenges, human needs, and critical thinking about technology through planetary boundaries and the economic donut model.

LOW-TECH ENTREPRENEURSHIP

Liberalism and consumerism have long underpinned the economy, but this approach is leading us toward disaster. Low-Tech offers new pathways:

Collaborative & circular economy

The entrepreneurial spirit can no longer be reduced to the financial aspect of business.

Entrepreneurs must manage the triple bottom line: creating triple value - financial, societal, and environmental - for all their stakeholders.



Useful, sustainable, and accessible... just like the guillotine and other historical or contemporary artifacts.

But are all artifacts equally desirable for individuals, society, and Nature? What technological legacy do we want to leave for future generations?



Ethics doesn't provide definitive answers - that would be too simple! But it equips us with tools to think critically about these questions, even if it means raising new ones.

RELIABILITY REPAIRABILITY RESILIENCE

Designing sustainably means creating solutions that last.



Repairable ones encourage upkeep over disposal

Reliable designs function dependably

Resilient ones adapt to challenges

Equally vital is considering the user, ensuring designs are intuitive, accessible, and meet real needs.

By prioritising these principles, we empower users, conserve resources, and ensure Low-Tech solutions remain practical, impactful, and relevant across diverse contexts and generations.

DESIGN FOR SUSTAINABILITY

Our socio-ecological challenges

What do we mean by Low-Tech? Can less be more sustainable? Is high-tech always the best solution? How can we find beauty in simplicity? What is good design?

THE ART OF SIMPLICITY

In a world where material resources are increasingly scarce...

...are there products that don't deserve to exist?

If so, how do we decide?



THE IMPERATIVE OF RESPONSIBILITY



TERRITOIRE

What dynamics undermine the relationship between society and its spatial and socio-ecological contexts?

Let's build a framework to understand the interactions between society, technology, nature, and culture, and how the dynamics of place and power can shape the pathways we take to coexist under specific circumstances.

OPEN DESIGN

Embracing openness and collaboration in designs



Knowledge: Are the plans available and understandable for everyone?

Are the items we are surrounded by truly accessible?

Skills - Can anyone build or repair them with their own means?

Finance: Are they free or low-cost?

For accessibility to be accessible, we must:

- openly document what we make and do (using open licenses)
- embrace commons-based approaches with appropriate resources, communities, and governance.

EFFECTIVENESS, EFFICIENCY, SUFFICIENCY

Trade-offs between criteria

Efficiency: Is the production effort optimized?

Effectiveness: Do the products actually meet needs?

Sufficiency: Are they designed without excessive abundance?

Focusing on one of these can degrade the others (e.g., impact deferral, rebound effect).

Addressing all is a challenge. Formalizing multi-stakeholder preferences can help clarify the importance of each criterion and rank alternatives accordingly.