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.

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).

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.

HACKATHON ACTIVITIES

Activities should be varied in **duration** and **complexity**.

To **evaluate** the work done, we adopted the hackathon style, which means that groups should **pitch their ideas to a jury**, and it's up to the jury to decide the best ones.

FOLLOW-UPS FEEDBACKS

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.

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

- Creation of a **Low-Tech Lab**
- Funding for a **PhD thesis**
- \+ Support for **Low-Tech projects and initiatives** in the «territoire».

Have you ever stared at your **microwave, smartphone or bike, wondering:**

What is their purpose in life?

Are they truly useful?

Can we sustain their manufacturing and use forever?

Finally wondering: **what would be sufficient for us to flourish collectively on this planet?**

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

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

To do

Using the Low-tech approach: question the dominant technical, economical and social models!

We encourage the reflection on **how those dynamics** (shaped by factors like gender, ability, and education) can be reimagined to co-create better realities!

INCLUSIVITY

RIEN POUR NOUS SANS NOUS !

Being critical of our current position in the world helps us establish the **privileges we carry** and the **discriminations we suffer** (intersectionality).

From there, we invite everybody willing to participate in the debates, to explore how to achieve a decent standard of living while caring for ourselves, others, and the planet.

Discover **LOW-TECH!**

An approach that highlights **usefulness, accessibility** and **sustainability** to discuss the role of **technology** around us!

INCLUDED tons of good questions

Key principles of THE LOW-TECH MINDSET

Visual Pocket Knowledge

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 FR01-KA220-HED-000027600

LT4sustain
https://lt4sustain.eu/

Designed by Juliette Patissier

European Union

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.

DESIGN FOR SUSTAINABILITY

Our socio-ecological challenges

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.

finance
society
environment

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?

Here! GO HERE
GO HERE OR HERE
THERE Here!

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.

THE IMPERATIVE OF RESPONSIBILITY

The three R's

RELIABILITY REPAIRABILITY RESILIENCE

Designing **sustainably** means creating solutions that **last**.

Reliable designs function dependably

Repairable ones encourage upkeep over disposal

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.

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?

OPEN DESIGN

Embracing openness and collaboration in designs

Are the items we are surrounded by truly accessible?

Knowledge
Are the plans available and understandable for everyone?

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.

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.

Trade-offs between criteria

EFFECTIVENESS, EFFICIENCY, SUFFICIENCY

How can we address criteria that are mutually influencing and sometimes conflicting?

Efficiency
Is the production effort optimized?

Sufficiency
Are they designed without excessive abundance?

Effectiveness
Do the products actually meet needs?

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.