



Co-funded by the  
Erasmus+ Programme  
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# O1: M2-Training

## Co-thinking and Creation for STEAM diversity-gap reduction (CreaSTEAM)

**2020-1-ES01-KA201-082601**

<https://creasteam.eu/>

[https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/#project/  
2020-1-ES01-KA201-082601](https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/#project/2020-1-ES01-KA201-082601)

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GReTEL

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# Welcome one more time

- ✓ Rename yourselves:
  - Your Name, Country “IT/TK/GE/SP” and School in brackets
    - **i.e.: “Roger SP(La Salle)”**





## CreaSTEAM Training Phase 1

14 - 21 may 2021, 14 h - 18 h (2 sessions of 4 h)

Zoom:

- [REDACTED]
- [REDACTED]

Course materials:

- at GRIAL platform, CreaSTEAM Project - Teacher Training

Pause: 1/2 pauses 10 min (?)

M1

M2

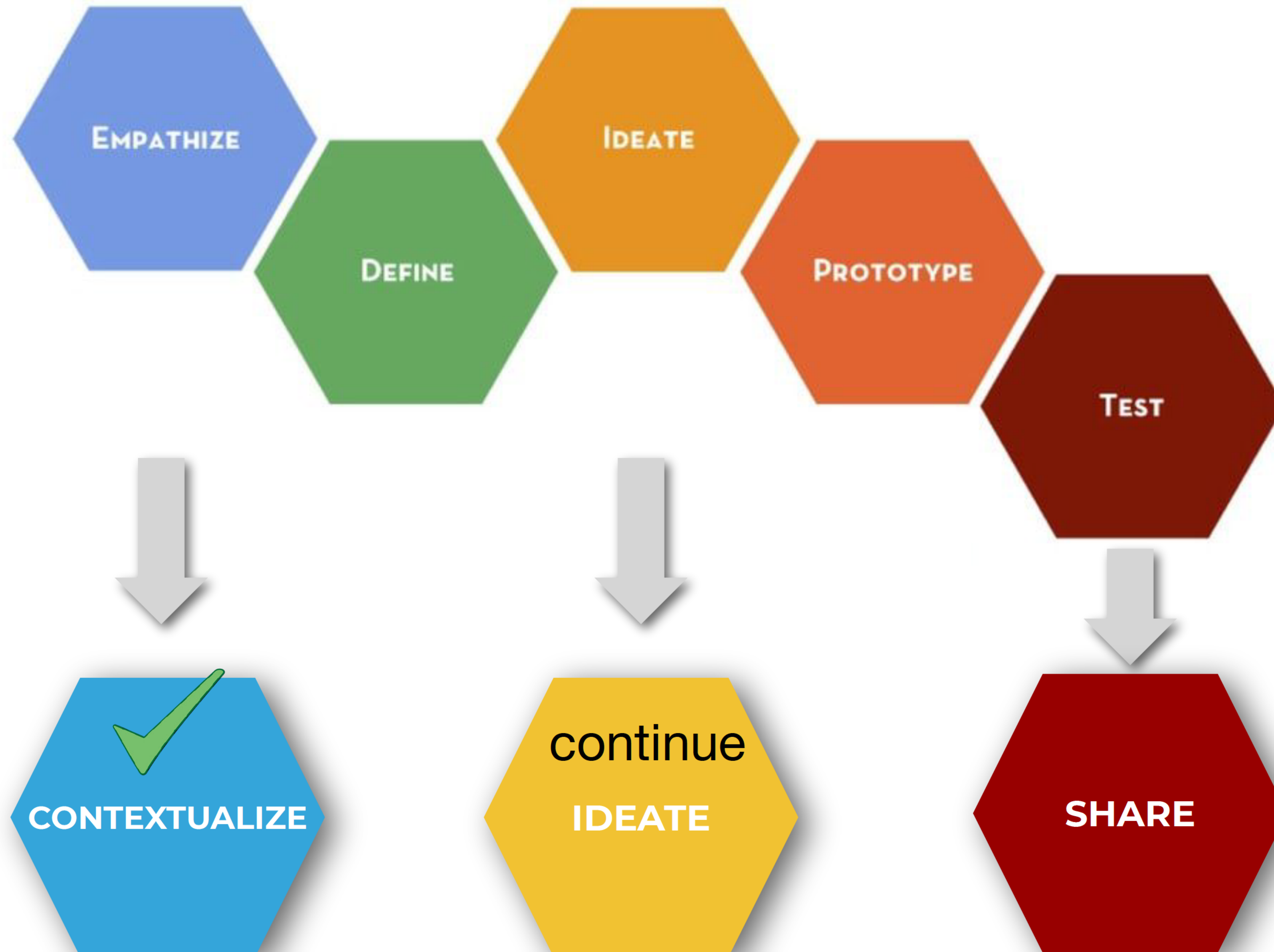
## OBJECTIVES

- Define **what a STEAM-Lab is**, related contents, methodologies, and results.
- First **approach to STEAM-Lab tools**.
- **Contextualize STEAM-Labs** in each participating school.
- **Ideate STEAM-Labs** in each participating school: proposal of the STEAM-Lab distribution, tools, organization, management, pedagogical practices, ecosystem.
- Show Didactic Unit's template.
- Collect interest in learning tools.



# Our process to create the “STEAM-Lab Action Plan”

inspired in  
**Design  
Thinking**







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Training 01, Co-thinking and Creation for STEAM diversity-gap reduction (CreaSTEAM),  
<https://creasteam.eu/>

# Let's continue with the Action Plan - IDEATE STEAM-Labs





## NEXT STEPS

### ✓ **Our objective for the next 1 h 30 min:**

- Finish Action Plan - IDEATE
- Upload your first version of Action Plan - IDEATE at GRIAL course

### ✓ **The process:**

- **45 min:** work on 2.1 and 2.2
- Checkpoint (5 min)
- **45 min:** work on 2.3 and 2.4

 [Template Action Plan - PHASE 2 Ideate](#) 

 [Upload here your Action Plan - PHASE 2 Ideate](#) 

Name your file as: Template\_Action Plan STEAM-Lab\_IDEATE\_School\_XXXXXXX\_v1







Let's continue with the  
**Action Plan - IDEATE  
STEAM-Labs**





# CHECKPOINT

## ✓ Pedagogical approach

Some links to example-reference projects:

### ● **Maker/FabLab Projects:**

- Projects from community: <http://instructables.com>, [www.hackster.io](http://www.hackster.io) ,
- Micro:bit <https://microbit.org/projects>
- 3D models to print: [www.thingiverse.com](http://www.thingiverse.com)
- Make.do projects expandable material: [www.make.do/pages/gallery](http://www.make.do/pages/gallery)

### ● **Creative/MediaLab projects:**

- <https://ditchthattextbook.com/10-ideas-for-digital-end-of-semester-final-projects/>
- QR codes, Interactive Maps, Interactive contents (Genial.ly), Design (Canva)





# SOME TIPS about STEAM-Labs

- ✓ STEAM-Labs are spaces of continuous change. It is good to start with a **single focus**...but you will have **add-ons**.
- ✓ **No two STEAM-Labs are alike.**
- ✓ To succeed, a STEAM-Lab must **balance equipment and culture!**
- ✓ What are the **passions and strengths of the organizers?** They may drive the focus of your STEAM-Lab.
- ✓ A STEAM-Lab requires a **great deal of planning.**
- ✓ STEAM-Labs **can be costly**...predicting future costs can be useful (it would be interesting to plan for the costs of equipment repairs maintenance, supplies, staffing training, construction contingency...but we didn't consider pertinent in this training).
- ✓ Consider **also creating facebook, twitter or blog page for your users.**
- ✓ Establish **policy**: burning temperatures, moving parts, cutting apparatus, procedures with injuries.
- ✓ Part of the value in maker education is **allowing learners to direct the experience.** Yet, even learner-driven activities require planning and guidance.
- ✓ It is very important to **document everything!!** You can also use a public blog, private log of your maker activities, online tutorials, project binders, photos, videos.
- ✓ A critical aspect of STEAM-Lab design involves **developing an empowering community of practice.**
- ✓ **Promote** your STEAM-Lab as much as possible.
- ✓ It is also good to think beyond your own STEAM-Lab and start **connecting with the larger community.**
- ✓ Build up **excitement for the opening** of your STEAM-Lab.
- ✓ To drive engagement, STEAM-Lab equipment must **excite the user base.**
- ✓ A STEAM-Lab operating on its own **without new inputs** can easily **ship into obsolescence.**
- ✓ It may be interesting to consider family workshops, extraescolar, services to outside users, exhibitions... or even a maker club.
- ✓ A STEAM-Lab focused on inclusion will help **users to feel empowered rather than intimidated when they enter the space.**
- ✓ **Radical inclusion:** embodies the idea that anyone can be part of the STEAM-Lab.







**Let's share in peers, give feedback and  
improve**

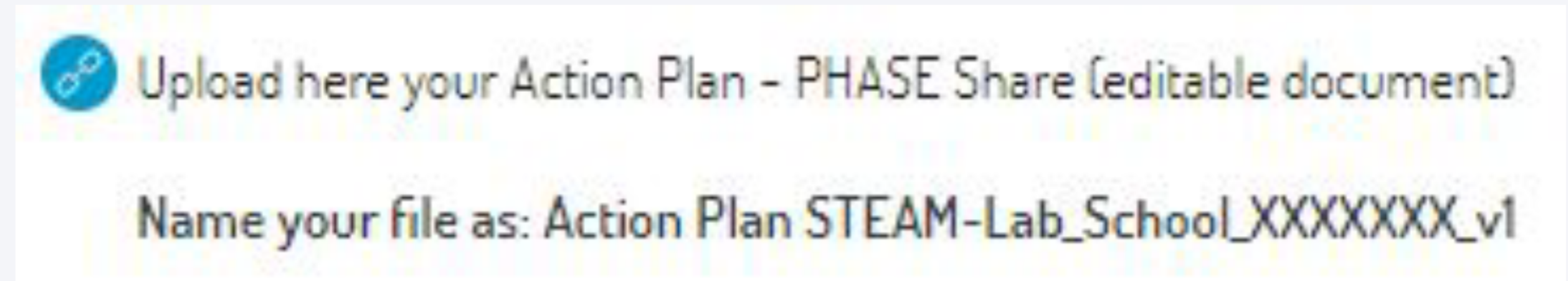
# **Action Plan - SHARE STEAM-Labs**



## NEXT STEPS

### ✓ Prepare the document:

- Join the complete Action Plan in just **one** document
- Name your file as: “Action Plan STEAM-Lab\_School\_XXXXX\_v1”
- Upload the editable document (doc / docx / gdocs) to this link into the course platform



### ✓ The sharing process:

1. Read peer Action Plan (20min)
2. Give and receive feedback (20 min)
3. Revise and improve our Action Plan (20 min)





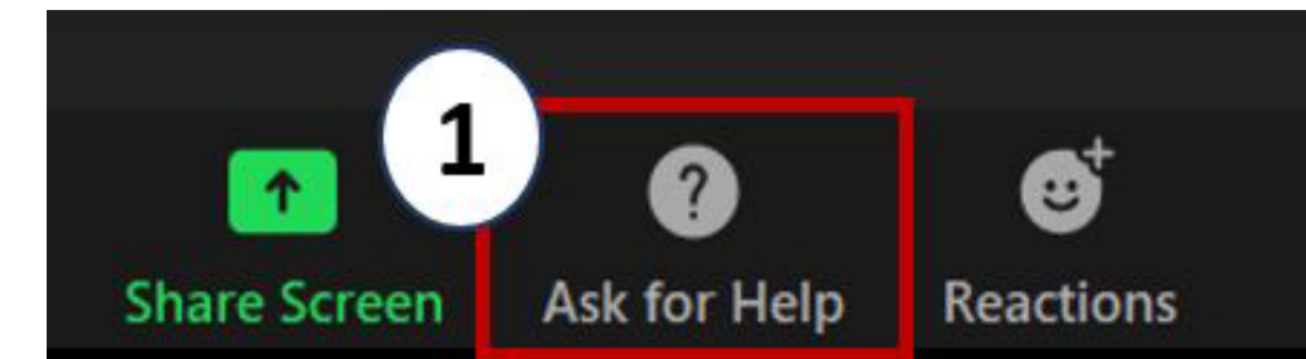
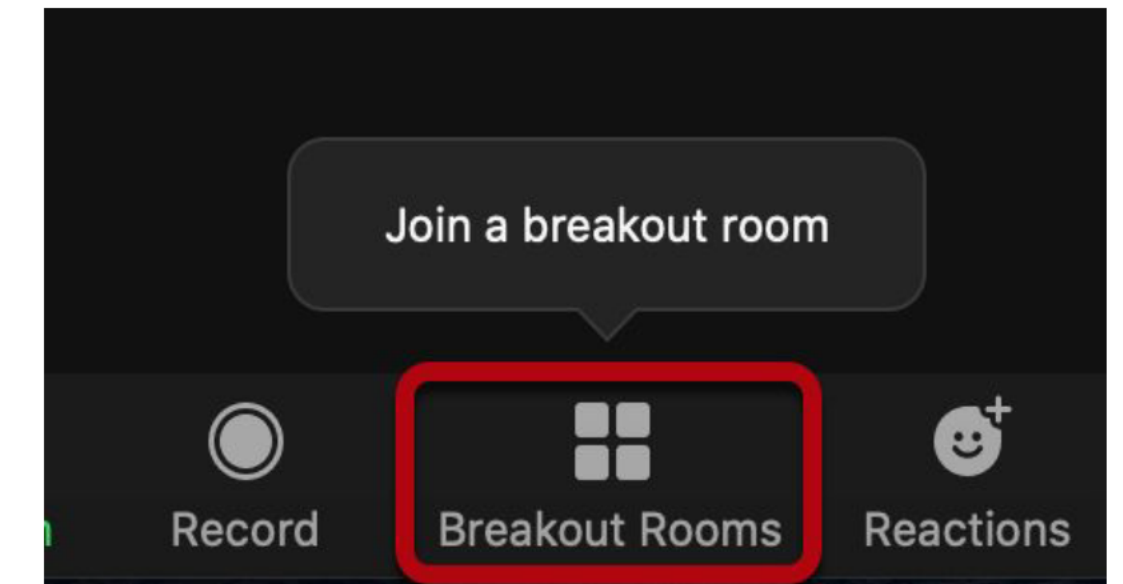
# Action Plan: "SHARE" in peers

Let's go to pair groups

Read peer Action Plan (20min)

Give and receive feedback (20 min)

Revise and improve our Action Plan (20 min)



Proposal of pairs:

[https://docs.google.com/spreadsheets/d/1o6E\\_1m9YLG0BYM9LyXUQNAGE-4liDAaJDNQ3iCdStg4/edit#gid=625785515](https://docs.google.com/spreadsheets/d/1o6E_1m9YLG0BYM9LyXUQNAGE-4liDAaJDNQ3iCdStg4/edit#gid=625785515)



Let's see what's next

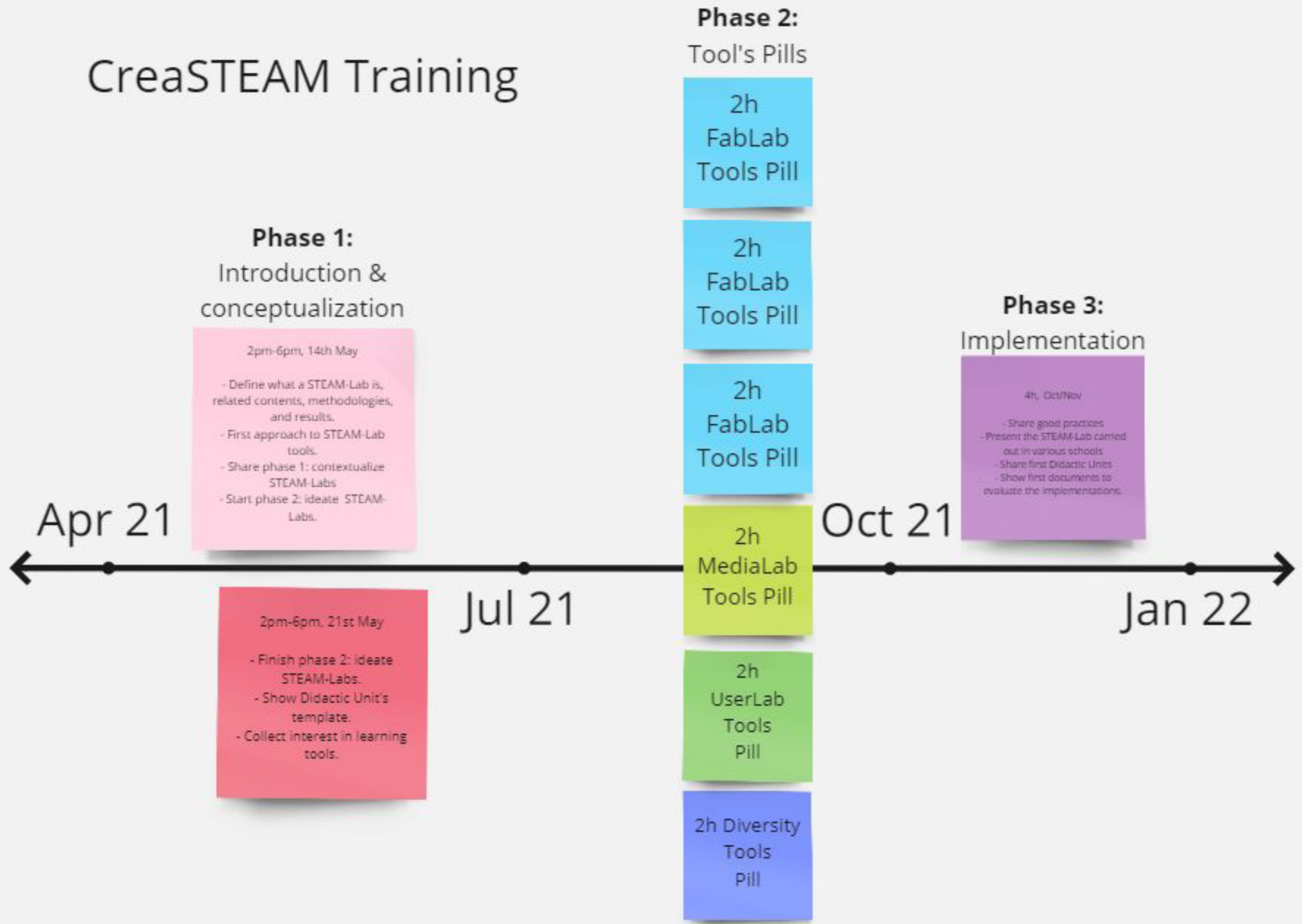
# Trainings and meetings

# STEAM-Labs





# CreaSTEAM Training





## Creasteam Training Phase 2

### Tool's Pills

Sep/Oct (6 pills of 2 h)

#### **OBJECTIVES:**

- Acquire practical skills in STEAM-Lab Tools

#### **PLAN:**

- 2h FabLab Tools Pill (3 pills)
- 2h MediaLab Tools Pill
- 2h UserLab Tools Pill
- 2h Diversity Tools Pill



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## Creasteam Training Phase 3

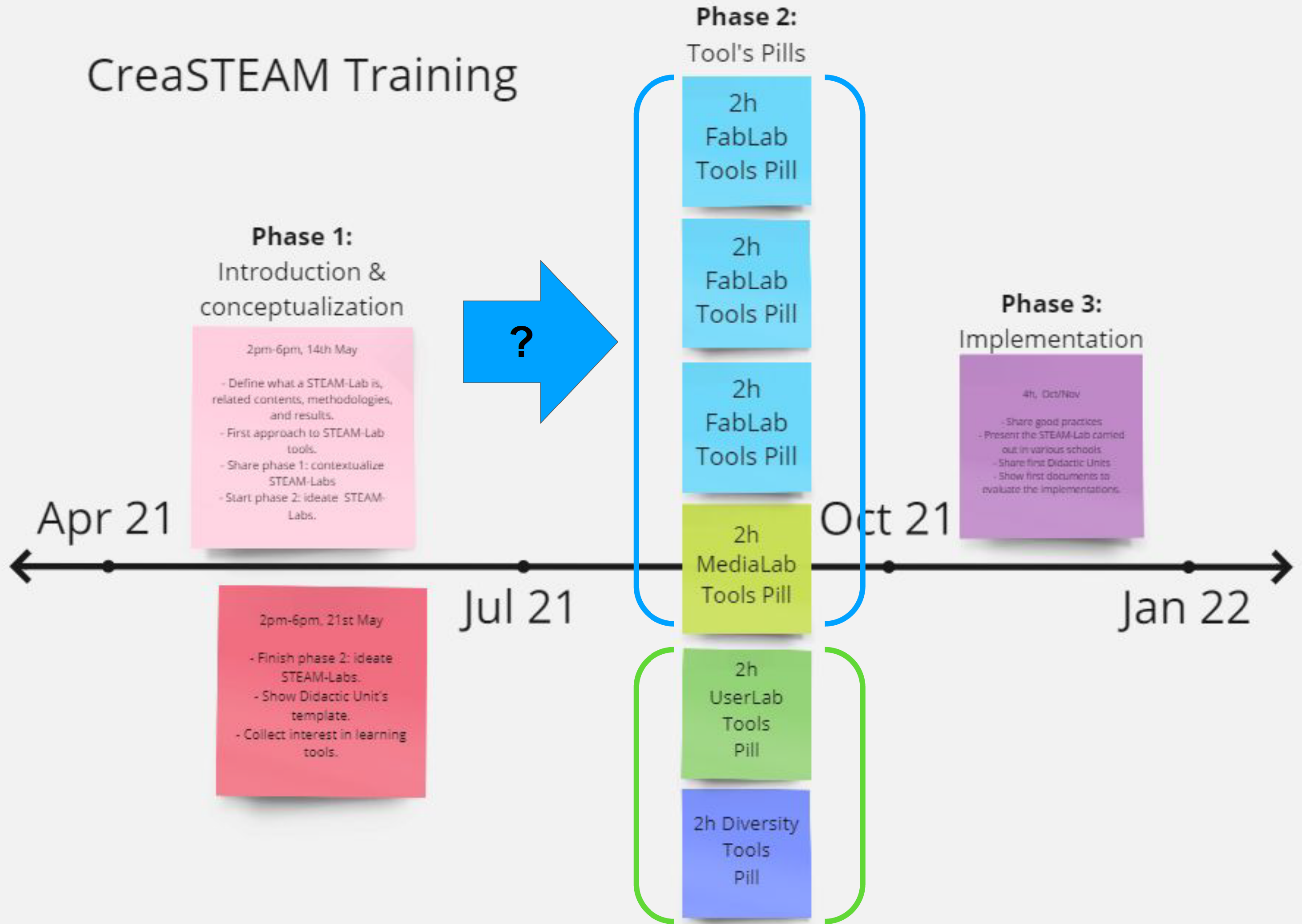
### Implementation meeting

Oct/Nov (1 session of 4 h)

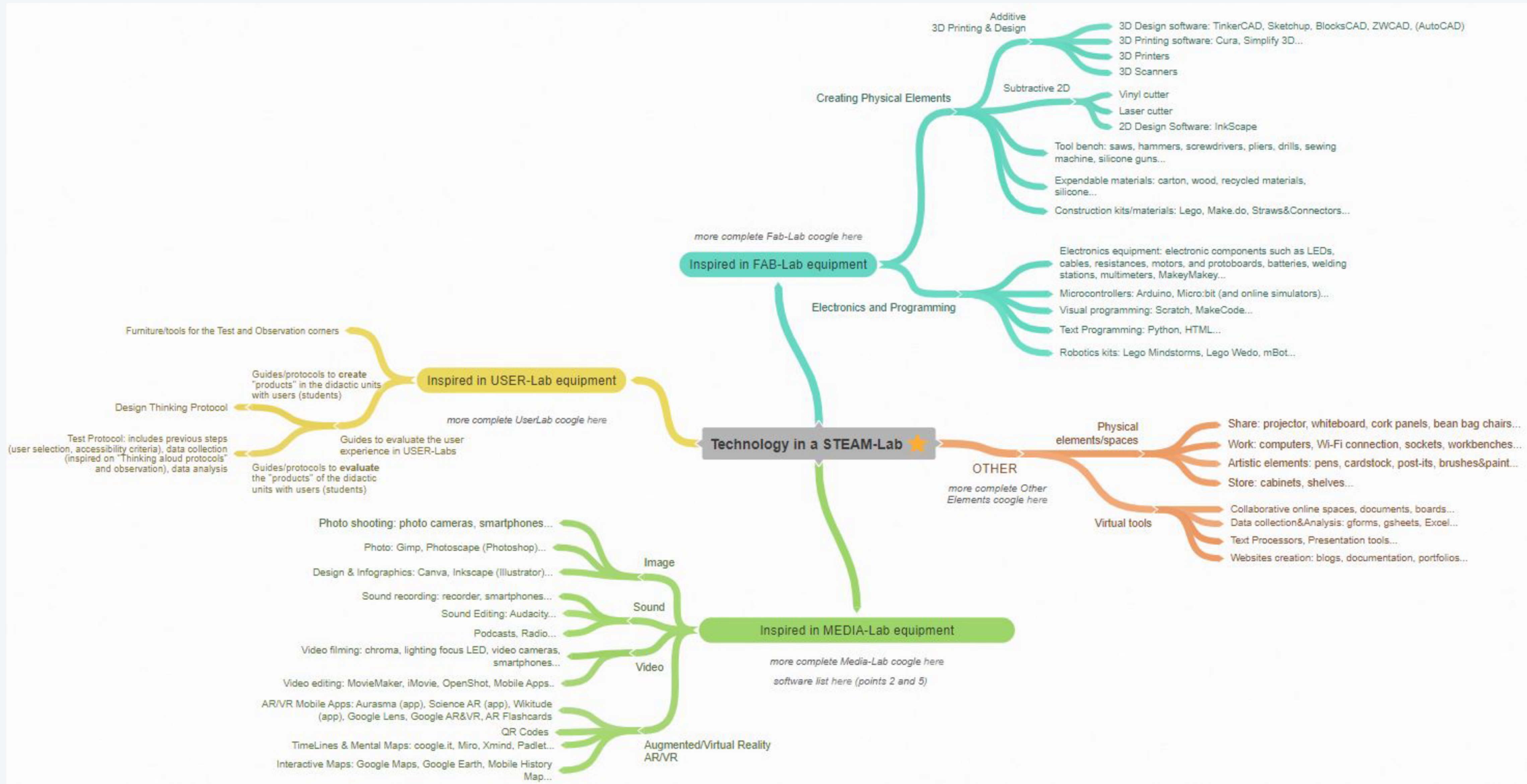
#### **OBJECTIVES:**

- Share good practices
- Present the STEAM-Lab carried out in various schools
- Share first Didactic Units
- Show first documents to evaluate the implementations

# CreaSTEAM Training







# Let's share and prioritize

In order to share your main needs for training pills:

- ✓ Mentimeter
  - <https://www.menti.com/motg98r2t9>







# Thanks

**See you soon. Let's keep in contact**

