

**Open Education Resource** 

GUIDE TO SETTING A FabConnectHer LEARNING CENTRE





Working to empower future female innovators through inspiration, skills, and networks to make an impact in the field of STEAM through education, reemployment or entrepreneurship



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## Guide to setting up and promoting a FabConnectHer Learning Centre

### **Learning Insights**

A FabConnectHer **learning insight** is a key takeaway from working with diverse learners, implementing new teaching strategies, or running handson STEAM activities. These insights help improve your approach, making learning more inclusive, effective, and impactful.

Here are some **key insights** and why they matter:

### 01 Understanding Learner Needs

Many participants, especially from underrepresented backgrounds, may need extra support like mentoring, flexible schedules, or additional resources. Recognizing this helps ensure everyone has an equal opportunity to engage and succeed

### 02 Adapting Teaching Approaches

Hands-on projects and creative challenges often make technical concepts easier to grasp. When lessons are engaging and interactive, learners are more likely to stay motivated and build confidence in their skills.

### 03 Promoting Collaboration

Encouraging peer-to-peer learning not only strengthens technical abilities but also creates a supportive community where participants feel more confident and valued.

#### 04 Championing Inclusion

Designing programs that reflect diverse cultural, linguistic, and socioeconomic backgrounds makes learning environments more welcoming and relatable, helping more people feel like they belong

#### **Empowering Women and Girls**

Showcasing real-world applications of STEAM—especially in creative and entrepreneurial fields—helps more women and girls see themselves as innovators, making a lasting impact on their confidence and career aspirations.

By applying these insights, you can create a more effective FabConnectHer Learning Centre where every participant feels included, engaged, and empowered to thrive in STEAM.

05

In this section, we present a quick guide for setting up and promoting a learning centre, this involves creating a welcoming and inclusive environment where participants can explore, learn, and innovate

01 Define the vision and objectives

Establish a clear purpose for the learning centre, including goals such as empowering women and girls in STEAM, promoting sustainability, and fostering innovation through digital fabrication.

- 02 Set up your space
  - a. Identify the physical or virtual space for your learning centre
  - a. Inspiration from Fab Lab Layout
  - b. Printed resourcesFCH Poster
  - c. Child safeguarding guideline
  - d. Upload your centre to the FCH Learning Centre map (TBC)
    - Fab Lab Reykjavik <a href="https://maps.app.goo.gl/FMGpEHafoTdsL8ja7">https://maps.app.goo.gl/FMGpEHafoTdsL8ja7</a>
    - Creative Spark Enterprise FabLab <a href="https://maps.app.goo.gl/njLhCeTgQPBRPNJs8">https://maps.app.goo.gl/njLhCeTgQPBRPNJs8</a>
    - Fab Lab Leon <a href="https://maps.app.goo.gl/DwT5DssQgWbr1jJn7">https://maps.app.goo.gl/DwT5DssQgWbr1jJn7</a>
    - VIVA LAB Porto <a href="https://maps.app.goo.gl/QJYLMHvjV5CAkqiFA">https://maps.app.goo.gl/QJYLMHvjV5CAkqiFA</a>
    - D'LAB https://maps.app.goo.gl/DwT5DssQgWbr1jJn7
- Develop your curriculum and Learning Pathways

  Using the available ECH and design your curriculum focused on STEAM sk

Using the available FCH and design your curriculum focused on STEAM skills and link it to your local education curriculum. Include hands-on projects and real-world applications from the FCH Learning Pathways.

02 Recruit and train instructors and mentors

Bring on board with instructors and inspiring mentors with a mindset to teach skills, provide career guidance, and promote gender equity in STEAM fields.

03 Promote and build partnerships

Create a strong brand and promote the centre through local collaborations, schools, women's organizations, social media, and community engagement events.

04 Launch the Learning Centre

Organize a launch event to introduce the centre to the community, and ensure ongoing operations include flexible, regularly scheduled programs to accommodate participants.

05 Monitor, Evaluate, and Adapt

Collect feedback, measure the impact of the programme, and refine the curriculum to align with participant needs, industry trends, and new technological advancements.

Base and impact questionnaires

**O6** Showcase Success Stories and Share Results

Highlight participant achievements and publish reports to share the learning centre's impact, helping to attract future students, sponsors, and partners. FCH Learning Centre map TBC

## **Promotion Tips** for the Learning Centre:

#### 01 Storytelling

Share the stories of participants who have benefitted from the program. Personal narratives can be powerful tools to inspire others to join.

#### **02** Collaborations

Collaborate with local schools, universities, and tech organizations to co-host events or offer joint workshops.

#### 03 Social Media Content

Post regularly with engaging visuals, behind-the-scenes moments, student success stories, and live event updates.

#### 04 Online Courses

If resources allow, create online workshops or courses that can be accessed globally. This could increase the reach of the learning center.

#### 05 Community Engagement

Host events like hackathons, workshops, or public talks on women in STEAM to raise awareness and engage the wider community.



The Diversity and Inclusion Strategy for the FabConnectHer project highlights its commitment to fostering equity and engagement among diverse groups, particularly women, in STEAM fields. At its core, diversity is defined as embracing differences across gender, ethnicity, abilities, age, socioeconomic status, and beyond, while inclusion ensures that everyone has equal opportunities and a true sense of belonging.

This strategy aligns closely with the principles of the Erasmus+ program, emphasizing accessibility, fairness, and empowerment. By making the project inclusive, FabConnectHer seeks to expand participation, enrich learning opportunities, and create a positive, collaborative environment where people from all walks of life can thrive.

Access to our <u>Diversity and Inclusion Strategy booklet</u> to implement those strategies at your FCH Learning Centre.

#### **Best practices for Sustainability**

Here are **some tips for you to implement at your Learning Centre**, to increase the fair use of materials and the resources available at your lab.

#### Selection of materials

We are dedicated to selecting materials for our activities based on key principles. Our commitment extends to choosing biodegradable materials that leave no trace on the planet when disposed of. Additionally, we emphasize responsible waste disposal by sorting different materials into designated containers for proper disposal.

#### We advocate for:

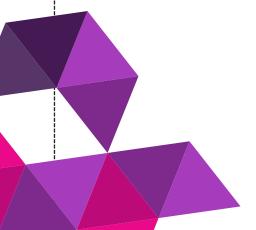
- Conscious reuse of materials, such as cardboard, paper, and disposable cups, in every activity.
- limit the use of disposable containers, opting instead for reusable alternatives without plastic.
- Promote the adoption of circular design principles in the planning of all our activities, aiming to create a sustainable and ecologically friendly framework for our endeavours.

To raise awareness about the carbon-free origin of the material resources to be used, the following questions could be introduced in the conversation:

- Low-carbon to produce?
- Long living and repairable?
- Produced locally?
- Plastic free?
- Ethically produced?
- Multifunctional?
- Can you ask the producer to reduce their unnecessary packaging?

#### **Case Studies**

Case studies from projects like SHEMAKES and M4KING SPACES provide valuable insights into best practices for establishing inclusive makerspaces. These examples demonstrate how to overcome challenges and create spaces that empower learners to thrive.



#### **Best practices for Sustainability**

#### **SHEMAKES**

The SHEMAKES project offers various learning paths designed for different age groups, focusing on empowering women, especially in areas traditionally dominated by men, like technology and textiles. These include activities for girls (8-18 years), young women (18-25 years), and entire communities, addressing gender issues, entrepreneurship, and innovation.

The activities cover skills such as laser cutting, soft circuits, modular fashion, and biomaterials. The resources and activities are shared in an open toolkit, allowing others to replicate them. More details are available **here**.



#### **M4KING SPACES**

The M4KING SPACES project offers a guidebook and a free online course designed to help makerspaces develop inclusive, equity-driven practices, particularly for underrepresented youth in STEM. The course, available on FutureLearn, complements the guidebook, providing tools, research, and resources to support diverse young people in their engagement with technology and creative production. More details can be found on their **official website**.





### **SCOPES DF chapter**

FabConnectHer has partners with Foundation to create a special collection to promote the lessons and resources with other fablabs.

The SCOPES-DF (Scaling a Community of Practice for Education in STEM through Digital Fabrication) platform is an initiative by the Fab Foundation aimed at transforming K–12 STEM education through the integration of digital fabrication technologies. It provides educators with innovative teaching models and students with engaging, applied learning opportunities.









### Follow our journey









www.fabconnecther.eu

