

COMMON POLICY AGENDA

Recommendations for Policy Makers

The Role of Makerspaces in Fulfilling Policy Agendas

Makerspaces, also known as fab labs, tech shops or hackerspaces, are community-based hubs for learning, prototyping, and collaboration, emerging as transformative forces in addressing multifaceted challenges (Cattabriga, 2020), from education and economic development to emergency resilience. These creative spaces redefine education, champion local production, and democratise resource access.

Founder Neil Gershenfeld describes fab labs, a specific makerspace format initiated at (Massachusetts Institute of Technology) MIT in Boston, as spaces where individuals are able to "create nearly anything." (Gershenfeld, 2012).

Numerous research and social innovation projects highlight the significant role of makerspaces in propelling innovation across social, educational, and business domains (Lindtner, Hertz & Dourish, 2014), impacting both local communities and the global landscape. Moreover, makerspaces possess the potential to actively contribute to critical global initiatives, including the Sustainable Development Goals (SDGs) through the promotion of circular-making practices such as reusing, repairing, refurbishing, and recycling, as well as supporting the objectives of the European Circular Economy Plan.

Supporting Makerspaces

Recognising makerspaces as strategic partners in building circular economies and societies unlocks their potential to work alongside governments. This collaboration can leverage government collaboration to provide infrastructure, policy frameworks, and resources, while makerspaces deliver on-the-ground innovation and community engagement. **The insights incorporated are drawn from the perspectives of 69 stakeholders (38% African, 62% European).** These stakeholders comprised makers, makerspace founders, educators, makerspace managers and makerspace community members.

This summary presents five main policy recommendations



Partnership with makerspaces on strategic national projects.



Implementation of targeted funding programs for makerspaces.



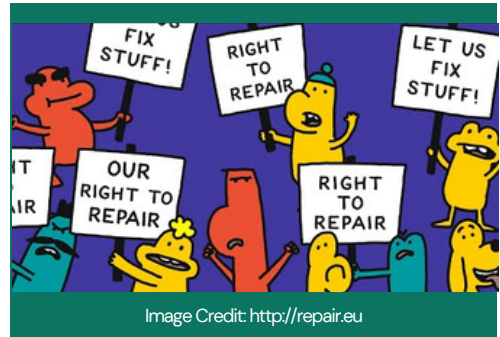
Governments should officially endorse maker programs and courses.



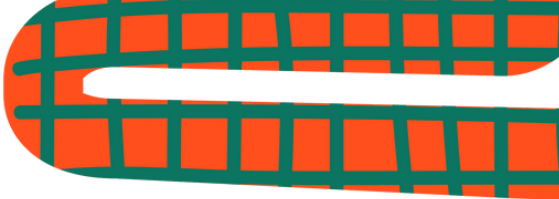
Integration makerspace activities and principles into formal education.



Governments should extend official recognition to makerspaces.



Germany	Denmark	Cameroon	Rwanda
Spain	UK	Nigeria	Kenya
Greece	Iceland	Uganda	Burkina Faso
Portugal	Italy	Ghana	Namibia
Netherlands		Zimbabwe	Tanzania



Top 5 Policy Recommendations

#1 Governments should leverage the potential of makerspaces by collaborating with them on national projects, focusing on building the capacities of youth and entrepreneurs and promoting locally made products.

Example

Typical examples are the collaboration between the **Government of South Australia and Makerspace Adelaide** on a circular economy workshop and partnership between the US embassy in Greece supporting the opening of Fablab Copernicus.

#2 Funding initiatives should be implemented to provide resources for makerspaces to tap into for their research and innovation projects.

Example

In **Maryland US**, there is an initiative that involves the collaboration between non-profit organisations and local governments to obtain grants for supporting makerspaces across the state.

#3 Governments should endorse maker programs or courses that receive government funding for local communities to further bolster the sustainability of makerspaces.

Example

In **Recife, Brazil**, with the backing of government funding and support, a once-isolated island has been transformed into a hub of technological innovation. This area now accommodates over 330 technology companies, providing employment for 11,000 individuals, and boasts approximately 800 entrepreneurs as of 2020 (Porto Digital).

#4 Makerspaces should be integrated into school curricula, particularly focusing on Science, Technology, Engineering, Arts, and Mathematics (STEAM) education.

Example

The **Rwanda Makerspace Consortium** in partnership with the department of education organised training for teachers. It marked the first step to provide makerspaces to 20 schools in Rwanda which will serve hundreds of students in Rwanda with the opportunity to engage in Playful Engineering-Based Learning (Rwanda Consortium Goal).

#5 Governments should extend official recognition to makerspaces, acknowledging their pivotal role in education, human resource development, and local industrialisation.

Example

Nepal Communitere, a makerspace located in Kathmandu, was established in response to the 2015 earthquake with the purpose of aiding in the production and repair of vital items. Similarly, Glia has been utilising 3D printing technology to manufacture life-saving tourniquets at various centres throughout Gaza since 2016. Throughout the COVID-19 pandemic, makerspaces have served as adaptable manufacturing hubs, producing critical equipment like personal protective equipment (PPE), diagnostic tools, and clinical care devices essential for saving lives.

Join the movement

Let's raise awareness about the maker movement, contributing to a future where creativity flourishes, and local communities thrive through sharing policy recommendations.

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