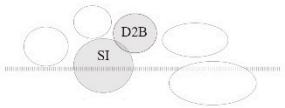
architecture

Supplementary file for figure 4 in the paper

The Socius in Architectural Pedagogy: Transformative Design Studio Teaching Models

a. Chalmers University of Technology, Gothenburg, Sweden – *Design Activism Beyond Sustainability- Architectural Education based on Collaborative and Radical Pedagogy*

CIRCULARITY



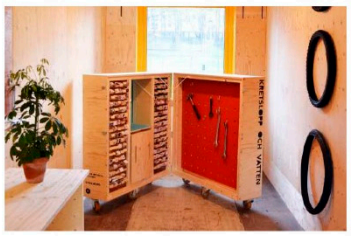
Fixoteket (fixing library)

Design and Planning for Social Inclusion + Dare to Build Studio

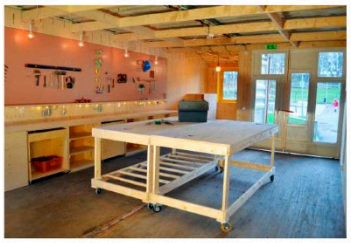
The City of Gothenburg in Sweden has a strong agenda towards a sustainable future within the areas of education, urban planning, energy, transport and consumption. To be able to achieve an enduring shift in behavior and mindset, it is important to offer more opportunities and easily accessible facilities to repair, share, up-cycle and recycle. This is to improve knowledge, reduce waste and energy use and create meeting places for the local community to connect, especially peripheral housing areas like the neighborhood of Hammarkullen. Fixoteket in Hammarkullen is one part of several Fixotekets around Gothenburg. The workshop space was developed after a year of student-based research that was accompanied by the municipality according to the neighbours' needs, and then built by the students together with residents.

It is highly relevant to improve the waste situation in Hammarkullen, both as a local goal for the neighborhood and to follow Gothenburg's and UN's agenda for sustainable development. Current lack of businesses and shops related to reuse and trading and a high unemployment rate makes the project essential.

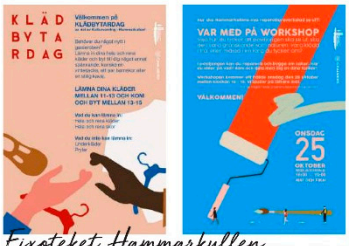
The project was developed and realized by students from the Social Inclusion studio in collaboration with local stakeholders and Bostadsbolaget in the first phase, later to be adapted and extended in the second phase by new students within the Dare to Build course.







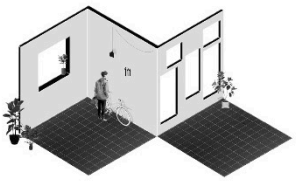
Images and project from the first phase of Fixoteket, by the students Carole Simons, Felicia Andersen, Josefin Eliasson, Kaj Norberg, Lennert Van Rompaey, and Marlene Sophie Lötsch.



Fixoteket Hammarkullen Participatory processes



Fixoteket was made to be used by the local community, and in an effort to introduce the space and its function to as many people as possible. Four activities were organized, inviting people to the space.



Year (of completion): 2018
Context: Hammarkullen, Gothenburg Sweden
Local partners: Bostadsbolaget, City of Gothenburg, Hyresgästföreningen (the tenants union)
External collaborator: ON/OFF design collective from Berlin.



The design and implementation of the Fixotek facility in Hammarkullen aimed to:

- Create meeting space, enable interaction between neighbours, stakeholders, experts and students, empowering the people, creating responsibility and giving the opportunity to be independent
- Introducing the concept of circular economy, use of tools, Do-It-Yourself, Do-It-Together, waste management, lowering threshold, giving an example
- Encourage a sustainable lifestyle, show reuse of building material, improve current waste management situation

Fixoteket Hammarkullen was always envisioned to be further developed in the future.





Images and project from the second phase of Fixoteket, by the students Carole Simons, Effrosyni Roussou, Felicia Andersen, Josefin Eliasson, Kaj Norberg, Lennert Van Rompaey, Marlene Sophie Lötsch, Mikael Bergqvist, Rebecca Johansson





https://doi.org/10.3390/architecture5030061

b. Department of Architecture, Gazi University, Turkey – *Active Collaboration in Architectural Design Studio: Enhancing Knowledge Networks for Excellence in Pedagogical Practice*

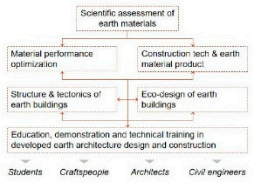


https://doi.org/10.3390/architecture5030061

c. Beijing University of Civil Engineering and Architecture, Beijing, China – *Building with Earth: A Mutual-educational Approach towards Sustainable Rural Revitalization Empowered by Traditional Wisdom*

Pedagogical Innovation

PHD Students



In terms of a series of technical challenges and issues, PhD students play a crucial role with their thesis study in assisting the professors with core technical research and providing technical support and training to all students and villagers in various projects.



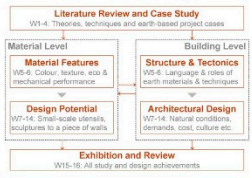
M-arch Students



The long-term practical study with demonstration construction for master students. Considering its handleable scale, the demonstration construction of earth dwellings provides students with an appropriate platform on which they could work as not only a core member of the project team but also an on-site architect.



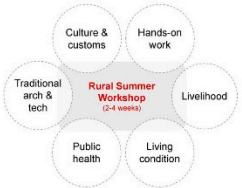
B-arch Students



The design course for Y4 and Y5 students is comprised of two studios which respectively focus on two scale levels. The material level emphasizes on the design application potentials of the earth material. The building level pays attention to the design methods of earth buildings.



Multi-major Students



An annual workshop has been held every summer since 2011. 40-60 university students from Mainland China, Hong Kong and overseas are mobilized to live in villagers' earth houses and join on-site construction of earth-based public facilities and demonstrative dwellings with local craftsmen and villagers.



https://doi.org/10.3390/architecture5030061

d. Architectural Engineering & Technology AET Programme, Cairo University, Cairo, Egypt – *Sustainable Community Design and Social Development: Activating Spaces within Green and Healthy Corridors*



https://doi.org/10.3390/architecture5030061