

International House Berkeley
Patrick Thelen & Vanessa Chehlawi
Building Hope: A Makerspace for a Refugee Camp
Bekaa Valley, Lebanon

Proposal: Building Hope

Since 2011, millions of Syrians have fled from the civil war, but even those who have sought asylum in more stable countries have yet to find peace. By implementing our project of building a makerspace in a refugee camp, we hope to help refugees regain their dignity. The makerspace will provide them with tools (e.g. sewing machines, saws, hammers, power tools) to build some of the items they need most. We believe this will allow them to immediately improve their living conditions, build strong communities, and hence, lower the potential for conflict and social instability. At the same time, the program can help foster the refugees' entrepreneurial spirit.

Our project aims to help refugees in a camp located in Bekaa Valley, Lebanon, which has been one of the countries most affected by the flux of Syrian refugees. Currently, there are more than a million registered Syrian refugees in Lebanon (i.e. one in five people in the country). Most of them live in poverty and lack access to some of the most basic needs. From speaking with refugees and NGO-officials we learned that they receive approx. \$15-30 cash per month in aid, which they use almost entirely to buy food, firewood, and medicine. Most settlements have some access to running water and electricity. Still, the provisional shelters offer little protection from rain and cold temperatures and the refugees lack access to appliances or recreational items. Using the makerspace, the refugees will be able to build furniture, cooking pans, and items such as clothing and toys for children, just to name a few.

Many refugees have backgrounds in construction or other vocational professions but simply lack access to the tools or funds. Having escaped war and traumatizing situations, they share a tremendous motivation to build a new home and peaceful community. Building such items will not only bring immediate relief to refugees, but also result in the positive feeling of being able to personally influence one's current situation. This will lead to various benefits:

Economic: Improve living conditions; decrease expenses for household items; build a micro-economy; reduce conflicts due to income inequality

Psychological: Provide a sense of self-control and personal impact; decrease frustration with the current aid structure; help build humanely acceptable homes

Social: Encourage community engagement; break down barriers between refugees and Lebanese population (e.g. by encouraging collaboration with suppliers)

Project Plan

To realize this project, we are in contact with two major refugee organizations. Through personal contacts we were introduced to Khalil Dagher (Inter-Agency Coordination Officer UNHCR) and Bruno Atieh (Director of Caritas Lebanon Migrants Center) who have shown great interest in the project and offered to help with the logistics and implementation. We hope that their experience can help us mitigate risk and ensure successful execution. We are currently working together to decide which settlement is most suitable for the implementation of our makerspace.

The project consists of the following phases:

Phase 1 - Planning (June): Work with the organizations to establish project logistics (how to get to the camp, accommodation, etc.); contact tool and material suppliers in Beirut

Phase 2 - Need-Assessment & Purchase of Tools (1st Week of July): Discuss with refugees which materials and tools will be most required and beneficial for them; purchase from suppliers

Phase 3 - Makerspace Setup with Refugees (2nd Week of July): Create a layout for the makerspace; set up tent and tools; organize stock of materials

Phase 4 - Testing & Training (3rd Week of July): Test all tools; set up organizational plan to determine fair and equal access; train refugees who have no prior experience

Phase 5 - Follow-Up (4th Week of July): Ensure proper functionality of tools; check whether any problems have occurred; make sure that the re-supply works; add missing tools or supplies

During the entire project, we will work closely with the refugees and include them in the planning and construction of the makerspace. This will ultimately lead to a stronger engagement and feeling of ownership and ensure that their needs are fully met.

Evidence of Success & Potential for Future Impact

Evidence of short-term success will be based on: 1) the engagement of refugees, including attendance at the training and setup of the makerspace; 2) successful testing of the functionality of tools and site; 3) ensuring immediate impact, i.e. the ability of refugees to independently build products; and lastly 4) the creation of an autonomous organizational structure, including established material suppliers that makerspace users can contact directly in the future.

We see great potential for impact as the makerspace can lead to more sustainable living conditions within the camp and instill personal pride by empowering people to build with their own hands. In addition, we believe that a makerspace can become an entrepreneurial hub, where refugees build products as commodities rather than only for their own use. This could lead to a micro-economy, the start of small businesses, and improved interaction with the Lebanese population.

Considering that more than 50% of refugees are under 18 years old, the space and tools can also be used for vocational training and workshops for youth. This way, the generation most affected by the lack of education and opportunities, can learn valuable, transferable skills and positively influence their environment. Finally, we believe that this project can serve as a pilot for the implementation of similar makerspaces in multiple refugee camps.

Team

In December, we won the 3rd place of the Hult Prize @ UC Berkeley with our idea to establish makerspaces in refugee camps and were thereafter recommended as participants for the Regional Round in March. Our team consists of:

Patrick Thelen (Germany, M.Eng. Industrial Engineering & Operations Research) participated in the construction of sustainable houses and establishing a community space for gatherings in a low-income area in Chile. Last semester, he won an Entrepreneurship Tech Competition with his design of a medical device for developing countries, working closely with the makerspace in the Jacob's Institute for Design Innovation - Berkeley.

Vanessa Chehlawi (Lebanon, M.Eng. Bioengineering) participated in programs for the improvement of conditions in Palestinian refugee camps while growing up in Lebanon. Recently, she led an initiative raising over \$100K to sponsor Syrian refugee families to settle in Canada, partnering with the NGO Lifeline. Her first languages are Arabic and French.