

Freeman Library Innovation Lab

An innovation lab, or makerspace, is a community-operated workspace where people with common interests, often in computers, technology, science, digital, or electronic art, can meet, collaborate, and learn. Makerspaces of various sizes and shapes have become more common in public libraries across the country and have been received by the public with very positive results. The Clear Lake City-County Freeman Branch Library, a Branch of the Harris County Public Library system, is working to develop such a space.

Freeman Library is pursuing this project for several reasons. First, libraries have periodically found it necessary to evolve with changes in culture, technology, and public needs. The changing perception of library as a community center resulted in the addition of special meeting spaces, study rooms, and training labs in new library buildings. The proliferation of the Internet prompted libraries to respond by offering computers with online access. The growing popularity of ebooks spawned the expansion of a digital ebook collection. All of these changes have been well-received by the public and have allowed the library to remain relevant. Now, the growing maker community here in the Houston area and the country at large is prompting us to consider how we might adapt once again.

Second, Clear Lake is a community full of engineers, and many of them are makers by nature. Recent discussions with local library users and organizations, among them local nonprofit maker group CreatorSpace, have made this fully evident. Recent collaborative maker programs at the library have demonstrated a significant interest in developing a makerspace and maker activities at the library. This community has expressed a need, and we would like to help fulfill this need as best we can.

Third, makerspaces encourage STEM values (i.e., Science, Technology, Engineering, and Math). While any public library can provide information about such topics, a makerspace would provide children and teenagers the chance to apply what they learn and practice STEM activities through open, creative experimentation and interaction with other makers in the community.

Fourth, while schools traditionally provide students the opportunity to apply knowledge, this often can only take place effectively during school hours. School resources are accessible only at certain times and, often, only to certain students. A makerspace in a public library provides creative, educationally-constructive opportunities freely available to all learners as long as the building is open and staffed.

Besides having an open innovation lab or makerspace which the community would be free to use, the library would intend to fulfill a structured educational purpose by planning, scheduling, and offering unique maker programs and classes to the public free of charge. Classes offered could include computer coding/programming, 3D modeling and design, basic electronics, video/photo editing and production, music production and editing, and introduction to microcontrollers (i.e., Arduino), to name a few.

Efforts are underway to make this project a reality. Due to a generous donation by deceased customer Jocelyn H. Lee, after whom the Innovation Lab will be named, Freeman Library found funds to seed this project. Construction is expected to begin soon. However, resources for equipment and support in order to sustain the activities in the Lab are being sought by the community. We would sincerely appreciate your support of this effort to make your community library an even greater resource for literacy and learning.

Characteristics of Innovation Labs/Makerspaces:

- Provides kids, teens, and adults the opportunity to play, experiment, and create
- Encourages STEM values (i.e., Science, Technology, Engineering, and Math)
- Provides the public the opportunity to apply rather than simply absorb knowledge
- Flexible, customizable, no one-size-fits-all design
- Encourages interaction and collaboration between makers in the community to learn and create
- Open to all ages
- Public libraries that have pioneered makerspaces:
 - Westport Public Library, Westport, CT: <http://westportlibrary.org/services/maker-space>
 - Fayetteville Free Library, Fayetteville, NY: <http://fflib.org/learn/make>
 - Allen County Public Library, Fort Wayne, IN: <http://tekventure.org/maker-station/>
 - Chicago Public Library:
http://www.chipublic.org/eventsprog/programs/innovation_lab.php
- Texas libraries currently planning makerspaces: