**LUNCH IN THE LIBRARY**

KE Hones, NBCT Librarian

What I like best is there is that any maker space is what you make it.

When I heard about Maker programs at a workshop at the Exploratorium (circa 2005), the focus seemed very technical, mechanical & usually a solitary activity. The first Maker Faire in the San Francisco Bay Area over 10 years ago brought together free ideas and a place to swap ideas, get new ones, and show off Maker creations. Last year, there were 1.2 million attendees to Maker Faire events around the world. And there are so many more ways to communicate today, to share & get inspiration. <http://www.exploratorium.edu/education>

There have been **three** specific inspirations for the maker spaces I have created at continuation high schools.

1. I heard about Students Rebuild, Healing Classroom Challenge to make pinwheels for a matching donation from the Bezos Foundation. I set up a box of supplies (paper, markers & colored pencils, scissors). On the outside of the box I posted the directions & information about the program. Students came at lunch created pinwheels, told friends, then came in again & again to make more pinwheels. Students helped me package the pinwheels to mail to the program, too. <http://studentsrebuild.org/find-challenge/syria-challenge>

*Advantage of this program: easy, supplies on hand, needs little or no support.*

2. I attended “Illuminate Your Thinking with Art & Tech” workshop at Contemporary Jewish Museum with a science teacher from one of the schools. The hands on workshop taught us step-by-step to create with paper electronics using copper tape, coin batteries & circuit sticker LEDs.  We also received an extensive list of resource & tutorial websites. I wrote a Teen Tech Week grant to get the paper electronics to provide our students with accessible hands on activities that support their science curriculum as well as incorporating art with technology!  I collaborated with a science teacher at each site. Prior to Teen Tech Week, classes will learned basic information about circuits in science class. Using the library homepage, students will view at least three paper electronics tutorials. During Teen Tech Week, in the library, students were introduced to the basic Illuminated books materials & directions.  Each student made & illustrate one book.  Museum  <http://www.thecjm.org/education/schools-and-teachers>

*Advantage of this program: Collaboration with teachers, ties to curriculum, lots of on line ideas & resources, able to get grant for supplies, on going interest from students to try new illuminated projects*

3. I applied for the Imagination Chapter Program last August (resource listed in email from ALA). All year ideas & donated supplies (Makedo, robots) encouraged maker activities at the schools. A great asset is the Facebook page where chapters can share ideas & projects. <http://imagination.is/our-projects/imagination-chapters/>

Spring Inventors Challenge: Students planned & drafted ideas for the bird feeders with recycle & up cycle materials like cafeteria lunch trays & plastic bottles & then build them & put in school garden.

Who: Science students @ Civic Center Secondary let imaginations fly, be wacky, have fun & make something for the birds! Inventing Bird Feeders for our school garden. *Sponsors: The Imagination Foundation in collaboration with AT&T Aspire invites kids of all ages to invent a solution to a challenge faced by their schools or neighborhoods.* For these students we had a follow up author/artist: John Muir Laws visit led students in drawing in nature journals in garden (including those birds feeders!): He emphasized that nature journals include writing & drawing & journals reenergize brain to focus on nature details. As part of bird watching & snail slime: questions start to arise+find the unusual in the common place; find new in old & start to ask questions. He encouraged students to be intentional- ask questions on a regular basis=brain will change & more  & more power of observation. Journals are most powerful for scientist, for naturalist, for write, for anyone to pay attention to the world & ask questions. Students did not want to stop!!

*Advantage of this program: Lots of online support, donated supplies, minimal support needed (posters clearly give steps).*

Bonus inspiration:

I was reading NEA magazine last year & there was a very short, clear article about using drones. Using the information in the article, I wrote a Donor’s Choose grant for 2 drones with cameras & some Google cardboard 3D viewers. Again I worked with the science teachers to set up some Maker activities. In August, Google Summit featured Google Cardboard resources so I am planning expanding with new ideas!

**FREE/low cost supplies**

1. SCRAP SF (also great workshops bookmaking) [http://www.scrap-sf.org](http://www.scrap-sf.org/)

2. RAFT San Jose [http://www.raft.net](http://www.raft.net/)

3. MoMA supplies give a way

**Grants**

2 grants to apply for $500 each

CalRTA  California Retired Teachers Association

Patricia Isaacs

2000 Trousdale Drive #307

Burlingame, Ca 94010

[http://calrta.org](http://calrta.org/)

Philanthropic Ventures Foundation

1222 Preservation Park Way

Oakland, CA 94612-1201

www.venturesfoundation.org

**Organizing Inspiration**

1. Maker Education Initiative’s resource library. <http://makered.org/resources/>

2. The Tech <http://www.thetech.org/educators/workshops-events>

3. Maker Shelves @ Asian Art Museum teacher workroom <http://education.asianart.org/professional-development>

4. And of course Pinterest!!

**TEN GUIDELINES Library MakerSpace**

1. Build the Make of the Week using the listed supplies (1x per person)
2. Check Maker calendar for ideas/activities
3. Use the bookmaking supplies
4. Use the Makedo Cardboard ideas
5. Design something using only the supplies in the “Idea Box”
6. Use resources wisely, do not waste because when it’s gone, it’s gone
7. Be collaborative: help, share, be curious, imaginative & kind
8. If you got it out, put it away
9. Please clean up/recycle All trash (including what’s on the floor)
10. Wipe down table

Maker Space is just starting in my libraries. Lots of librarians already do maker activities: bookmarks, coloring pages, origami, bookmaking.

**TO EXPAND**

* Look at your specific student interests (ask them?!)
* Find free resources around the school (old books ring a bell?!?!)
* Collaborate with teachers (bookmaking with any subject area!)
* Write a grant for special maker programs
* Build on success-displays, more grants, Student Maker Club…

Last fall our teen moms participated in a Shadow Puppet workshop & then created puppet shows in Spanish & English.  They discussed, researched & then designed fun early learning shows for the infants & toddlers.

At the end of the year they reflected on what skills, ideas & techniques they have learned in reading, writing and creation of puppets & the scripts.

The final show was Old MacDonald. One of the students said she would “organize” the play. Everyone worked on a puppet & sang the song! The surprise was her puppet: a cute little tiger on the farm!!!