Hacking and Making in the Youth Department at Surrey Libraries

By Caroline Johnson and Tamarack Hockin.

Maker workshops (and makerspaces) are the new hot trend in library programming. So what is a maker workshop? Well, basically any program that encourages people to create something, most commonly interpreted to mean make something involving technology.
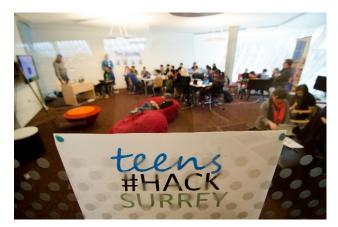
Libraries across Canada and BC are joining the maker movement, and in some cases, leading it. Maker programs are especially vital for youth. Encouraging creativity helps young people develop vital life skills, such as problem solving and thinking outside the box. Maker programs that encourage participants to create with technology allow them to develop both confidence and the mastery of technology that is now one of the most critical job skills for the workforce of the future.

Teen Services at Surrey Libraries recently delved into maker programming. This past spring break, we hosted three maker-themed programs: Surrey's first Teen Hackathon, two WebMaker Teens events, and a Stop-Motion Animation workshop.

Teen Hackathon

The Teen Hackathon could never have happened without bringing in people and expertise external to the library. The important inspiration was a document out of the Ministry of Education called "How To Hackathon With Youth" (link below). Being introduced to the mechanics of hackathons during Datacamp VPL was our catalyst to investigate and reach out to partners. Our city GIS department was excited to guide the teen hackathon, and brought in critical data sets, expertise, and special guests developers. It was a four hour workshop during which the teen "hackers" learned how to map multiple geographic datasets to highlight relationships, how to create snazzy infographics to visually represent data, developed part of an online gaming world, and learnt about the stages of app development.

Check out *How to Hackathon With Youth*: http://www2.gov.bc.ca/assets/gov/topic/B125BBFA3 197257535F97E315A83E564/uploads/how_to_hackath on_with_youth.pdf [PDF], and see some coverage of our event in the *Surrey Leader*:

http://www.surreyleader.com/community/251096711. html
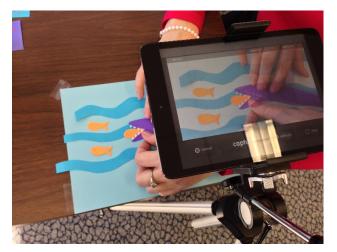

Teen Hackathon.

Webmaker Teens

We have also dabbled in web literacy using Mozilla's Webmaker tools. Webmaker tools features tutorials and guided activities to hack (modify) webpages by changing the html. It's surprisingly simple, and the teens we worked with caught on quickly and easily. X-Ray Goggles lets the teens access the code to a live webpage (like your library's website!), and change it (temporarily, on a local version-- not live on the Internet). Thimble Maker provides editable template webpages in a split-screen so teens can see the code and the result live in real time (for example, a template for a personal webpage where you add your photo and information about yourself). The third magnificent tool is Popcorn Maker — a simple multimedia editor that allows users to mix video or images with different audio files. Our teens made music videos with dancing dog GIFs and video highlights of car chases from YouTube!

Check out the Webmaker Tools and "makes" (activities and tutorials): https://webmaker.org/en-US/tools, and Mozilla's Web Literacy Standards: https://wiki.mozilla.org/Learning/WebLiteracyStandar d

Stop-Motion Animation

Stop Motion animation is a great way to get kids and teens engaged in making. We did this workshop with several different age groups. We were inspired by the NFB's "Get Animated" campaign several years ago, when Reel2Reel put on animation workshops for the public. We started by demonstrating to the kids how to do very basic stop motion animation, using cut outs (made with high tech construction paper and scissors!). We also showed them a very short animated video we had put together. We explained the concept of storyboarding and broke down scenes from our homemade video for them. They had a great time, and produced some very lively videos! Comic book style explosions and expressions were popular (think POW! and BANG!, in successively larger coloured starbursts) in thrilling montages of destruction, car chases and air bombing scenes. In addition to paper, scissors and glue, we used iPads, iMotion HD, tripods and clamps.

Stop-motion animation workshop.

Resources in the Community

If you're looking for some maker program ideas, consider the resources in your community. There are lots of maker groups around that will be happy to come to the library and do a program for you – think local colleges, universities, high schools, alternative computing groups and even municipal IT staff! Local Makerfaires are also a great way to connect with maker groups and get some great programming ideas.

Vancouver Maker Foundation
http://www.vancouvermakerfoundation.org

FreeGeek Vancouver
http://www.freegeekvancouver.org

Victoria Makerspace
http://makerspace.ca

Reel2Reel
http://www.r2rfestival.org/

Maker Mobile Workshop on Wheels
http://www.makermobile.org/

MakerLabs (Vancouver)
http://www.makerlabs.ca/

Vancouver Community Laboratory
http://vancommunitylab.com/

Happy making!

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Tamarack Hockin works with teens at the Surrey City Centre Library, and is looking forward to co-piloting their first Teen Maker Camp this July and August!