MAKER SPACES IN OUR LIBRARY

THE ROAD TO CREATING OPPORTUNITIES IN A LIBRARY CONTEXT

PRESENTATION BY DEBBIE HUNTER AT THE BRISBANE QSLA AGM, MARCH 2014
LIBRARY SPACE AS A PLACE TO ‘GET STUFF’… OR A PLACE TO ‘MAKE STUFF’

• What the pedagogy says:

• Creating, social places, integrating into everyday, shaped by individual interests, self generated, can get information, offer new technologies, imaginative passionate places.

• Maker Space is.. ”an effective means of applying knowledge, and tapping new resources for knowledge… embrace tinkering.. foster peer interactions and individual interests.. challenged to complete a project.”
STEP 1: IDENTIFY THE GAPS, FIND THE NICHE

• Find out what’s available in your school already. Target the gap to create a Maker Space opportunity in your library.

• Our Clubs: The Shed, Computer club, Robotics club, Mechatronics, AV/New media and others.

“You must gather your party before venturing forth”
- Baldur’s Gate
STEP 2: BASE YOUR DECISIONS FOR A NEW PROJECT ON WHAT YOU ALREADY KNOW ABOUT GOOD LIBRARY PRACTICE

*We know:*

- Students evaluate works better if they have an understanding of processes required to make it.
- Students learn better with constructive collaboration, shared ideas and workspace.
- We need to seek opportunities to offer global, ethical and cybersmart projects, often beyond the curriculum classroom.
- We need to create physical spaces/environments for all learning styles.
STEP 3: WIDEN YOUR CONVERSATION BEYOND THE CLASSROOM AND TEACHERS YOU KNOW.

• Learn what questions you need to ask..
  Join a Hacker group, share readily what you know and think.

• Free webinars are everywhere: Brain Pop, Atomic Learning, ASLA, Tynker, Meet Ups.

• Focus on people, collaboration, and a variety of interests.
STEP 4: ROLL UP SLEEVES AND GET HANDS DIRTY!

- Introducing the Lunchbox Club for our library.
- Without a formal space or time slot, we will offer kits for groups of 4. Self chosen with some direction. Could be overseen by seniors, shared team of staff.
Top 10* Tools of the Maker Movement for Classrooms

**Computer controlled fabrication**
1. Additive (3D printer)
2. Subtractive (mill, cutter)

**Physical computing**
3. Robotics
4. Microcontrollers (Arduino)
5. Microcomputers (RaspberryPi)
6. Wearable computing (Lilypad, Flora)

**Programming**
7. Block-based (Scratch, SNAP, good for robotics)
8. Text-based (C, Arduino, Python, Processing - good for computing, design)

**New conductive materials**
9. Conductive paint, glue, tape, thread
10. Graphite pencils

**Inventive interface elements/kits**
11. MaKey MaKey
12. Hummingbird

**Electronics components**
13. Displays & LEDs
14. Sensors (light, heat, motion)
15. Motors
16. Special purpose batteries

**Traditional/hybrid materials**
17. Squishy Circuits
18. Cardboard
19. LEGO

**Shared content & community**
20. Design warehouses (Thingiverse, MAKE, Sparkfun)
21. Community websites
ON OFFER

**SOME PROJECTS ON OFFER**

- **Geocaching**
- **Go Pro project**: explore its potential
- **Animation project, small programming, Aurasma projects**
- **Historypin**
- **Online Classrooms experience**: Skype Mystery classroom, iEam projects, Flat Connections projects
- **Teleconference opportunities**: NASA space wave, Film Archives etc
- **‘Real’ guests visit**: 1 per term. Ham Radio, Astronomer.. Who do you know?
- **Student choice**

We love Arduino and we love spa to combine them and let people n
URLS LIST

• http://blog.play-i.com/designing-play-experiences-bo-yana/
• https://education.skype.com/users/80935-hunter
• http://channel.nationalgeographic.com/channel/live-from-space/?utm_source=NatGeocom&utm_medium=Email&utm_content=member_digest_20140304_live_from_space&utm_campaign=Membership
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