

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.



STEP 2: BASE YOUR DECISIONS FOR A NEW PROJECT ON WHAT YOU ALREADY KNOW ABOUT GOOD LIBRARY PRACTISE

We know:

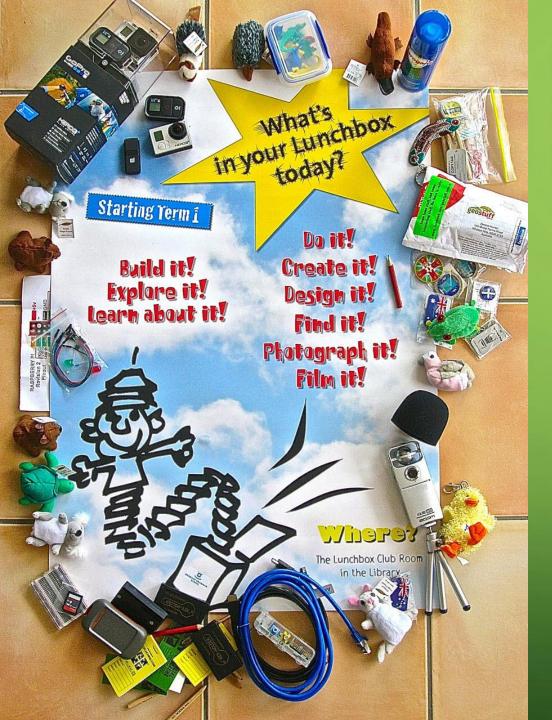
- Students evaluate works better if they have an understanding of processes required to make it.
- Students learn better with constructive collaboration, shared ideas and workspace.
- We need to seek opportunities to offer global, ethical and cybersmart projects, often beyond the curriculum classroom.
- We need to create physical spaces/environments for all learning

Creative people

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: <u>Brain</u>
 <u>Pop</u>, Atomic Learning, ASLA, <u>Tynker</u>,
 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.





Attendee 3 is talking

CHOOSING THE RIGHT FOCUS











★ 52% □

Top 10* Tools of the Maker Movement for Classrooms

Computer controlled fabrication

- I. 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)
- 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
- Special purpose batteries

Traditional/hybrid materials

- 17. Squishy Circuits
- 18. Cardboard
- 19. LEGO

Shared content & community

- Design warehouses (Thingiverse, MAKE, Sparkfun)
- 21. Community websites



Skype Mystery classroom, iEarn projects, Flat Connections projects

Teleconference opportunities: <u>space wave</u>, Film Archives etc

 'Real' guests visit:1 per term. Ham Radio, Astronomer.. Who do you know?

Student choice

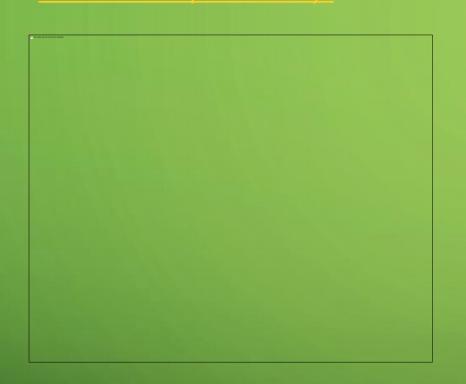
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http://laughingsquid.com/pinokio-desk-lamp-robot-is-reallife-version-of-pixars-luxo-jr/





https://www.kickstarter.com/projects/575960623/ardusat-your-arduino-experiment-in-space





We love Arduino and we love spa to combine them and let people ru







URLS LIST

http://blog.play-i.com/designing-play-experiences-bo-yana/

http://laughingsquid.com/pinokio-desk-lamp-robot-is-real-life-version-of-pixars-luxo-jr/

- https://education.skype.com/users/80935-hunter
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