

MAKING MAKERS

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WHAT IS A MAKERSPACE?

- ✘ There are various definitions and alternative names for a makerspace but essentially....

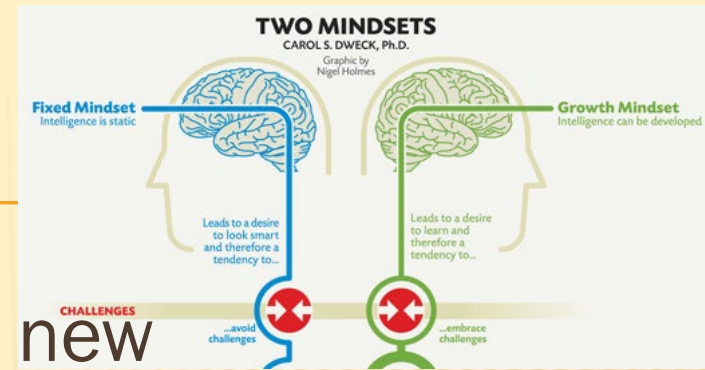
A makerspace is a space that facilitates creativity, invention and making. The focus of the creativity should be on the intersection of technology with physical making. Participants are known as makers and are encouraged to continually engage in a cycle of “think > make > improve”.

Makerspaces allow for “informal and shared social learning”.



THE MAKER MOVEMENT:

- ✘ A response to the explosion in new technologies that are accessible to average people
- ✘ Aims to create “interconnected communities, defined by interests and skills”
- ✘ Aims to ignite an interest in how things work, how things can be improved and what things need to be created/invented - innovation
- ✘ Promotes the mindset of “experimental play”
- ✘ Is ‘open-source’
- ✘ Philosophy/maker mindset is similar to Dweck’s “growth mindset”

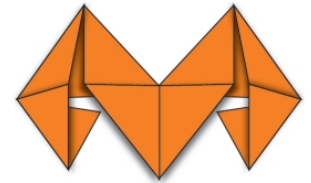


WHY BOTHER: SCHOOL SETTING

- ✘ Prepares students for careers/technology that are yet to exist
- ✘ Promotes curiosity, creativity, independent learning, risk-taking, collaboration
- ✘ Making is intrinsically motivated. Students often enjoy the journey as much as the end product
- ✘ Making is not age-specific
- ✘ Making is inter-disciplinary/ trans—literate
- ✘ Promotes technical education within a mainstream education – avoids distinction between ‘makers’ and ‘consumers’
- ✘ Provide access to shared technology and equipment
- ✘ Teacher as facilitator, not holders of knowledge



AUSTRALIAN MAKERSPACES



MILL PARK LIBRARY
MAKER SPACE

- ✘ Mill Park Library
- ✘ Library at the Dock (Docklands, VIC)
- ✘ Adelaide City Library
- ✘ Fab Lab Adelaide
- ✘ Mackay Regional Council Libraries (QLD)
- ✘ Werribee Library
- ✘ The Edge, State Library of Queensland
- ✘ Wyndham City Council's Youth Resource Centre (Hoppers Crossing)
- ✘ Fablab @ Lauriston Girls' School (Armadale)



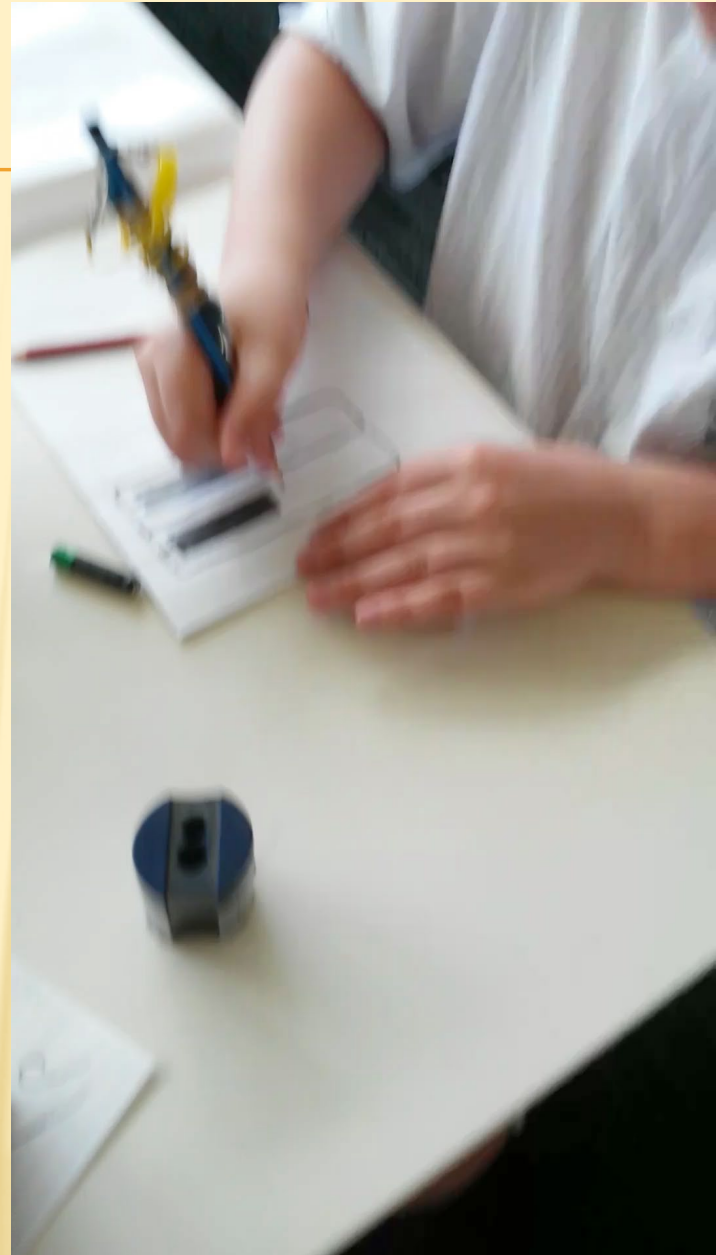
MY JOURNEY SO FAR

- ✘ Inspired by a presentation by Kristin Fontichiaro from University of Michigan at SLAV conference
- ✘ Researched kits and purchased them myself
- ✘ “Experimented” on a class of students and my own daughter
- ✘ School purchased 3D printer
- ✘ Volunteered to run year 8/9 alternative program
- ✘ Makerspace club
- ✘ Working towards permanent space and mindset



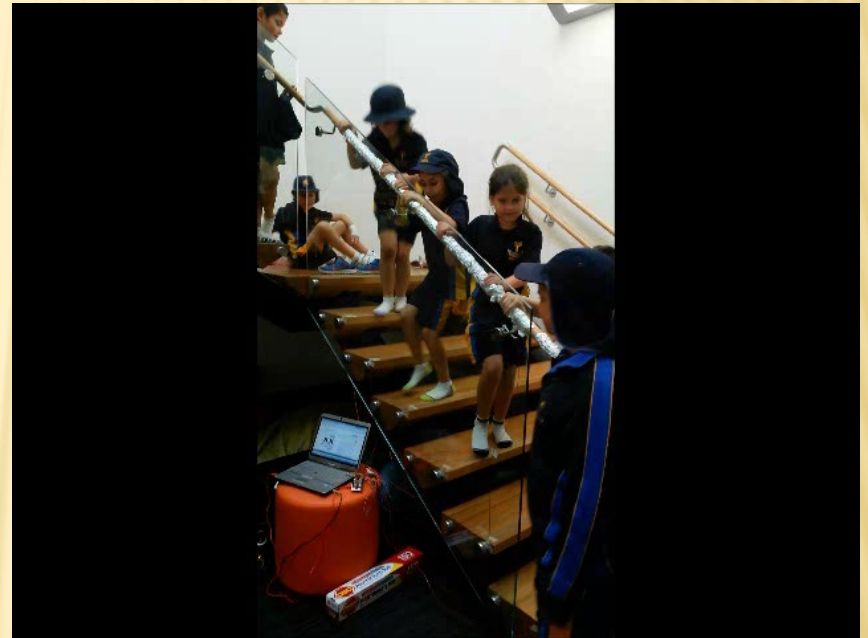
THE MAKERS MAKE

✘ Drawdio



THE MAKERS MAKE

- ✘ Interactive hopscotch & Musical staircase



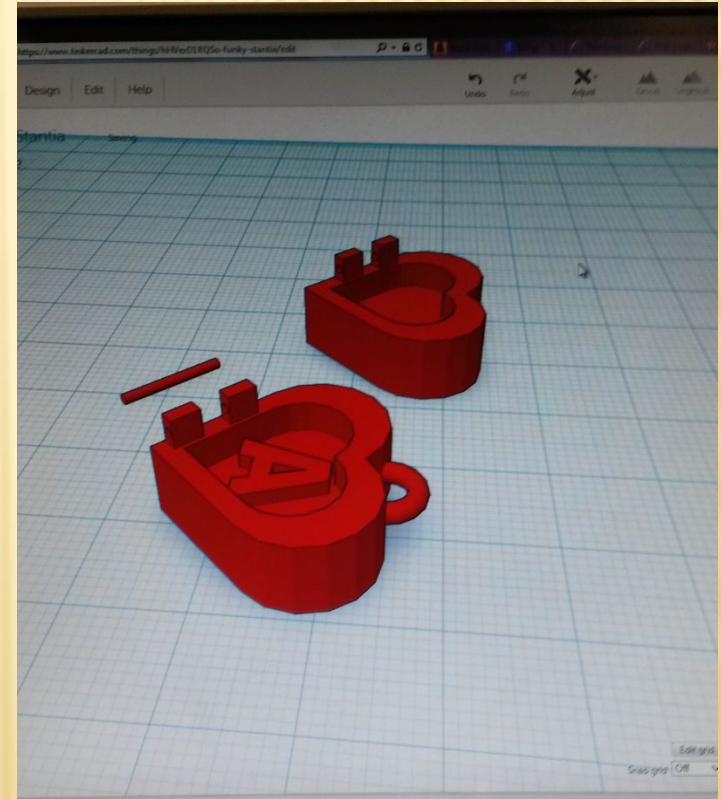
THE MAKERS MAKE

✘ Lunchtime club



FUTURE POSSIBILITIES

- ✘ A school-wide maker mindset, not as an exclusive subject
- ✘ A well-equipped makerspace, accessible to all
- ✘ Another shared learning space
- ✘ Transferral of maker mindset to other subjects
- ✘ Community and university links



SETTING UP YOUR OWN MAKERSPACE

✘ There are good lists of equipment available

BUT

✘ You don't need to spend money

✘ You don't need to have a dedicated space

✘ You need to have a flexible space

✘ You need to be resourceful

✘ You need to encourage creativity

✘ You need staff who are willing to learn or source knowledge

✘ You need to form knowledge networks – people as resources



USEFUL RESOURCES

- ✘ Maker Media. 2013. Makerspace Playbook: School Edition. *available online*
- ✘ Boyle, E., Collins, M., Kinsey, R., Noonan, C., Pocock, A. 2014. Creative spaces in public libraries: a toolkit. *available online*
- ✘ Make magazine
- ✘ Numerous websites, such as
 - + Thingiverse, maker camp
 - + See *also*: hackspace, maker movement