

# Inspiring The Next Generation



# Who am I?

- Haydn Insley
- Manager – Fab Lab Manchester
- Engineer, Musician, Educator
- The Manufacturing Institute



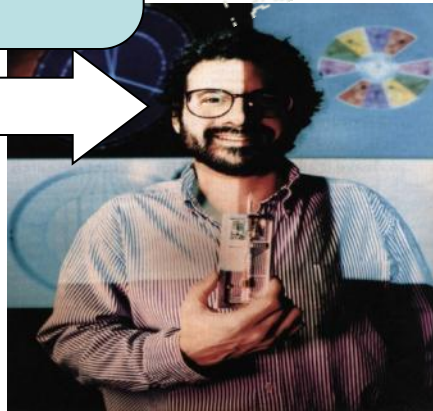
# Fab Lab Beginnings

10 years ago at  
MIT



Course – “How to make almost anything” – Taught by Prof Neil Gershenfeld

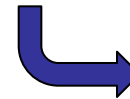
Here's Neil



Fab Lab Boston



Ghana  
India  
Norway



The World

# Current State



# What is a Fab Lab?

- A fully kitted **fabrication laboratory** containing all the necessary design, engineering and manufacturing equipment capable of supporting single user production of ideas from inception through to prototyping

# and why it's different...

- Provides easy access to the tools for digital fabrication and prototyping
- Empowers individuals, rather than institutions, to be able to make almost anything
- You can experiment



# So what equipment is there?

- ▼ Electronic components and tools, oscilloscopes, function generators



- ▼ A precision (micron resolution) milling machine to make three-dimensional moulds and surface-mount circuit boards



# Fab Lab equipment

- ▼ The Shop Bot - A larger computer-controlled milling machine, for making much larger parts – boats, furniture, moulds etc.



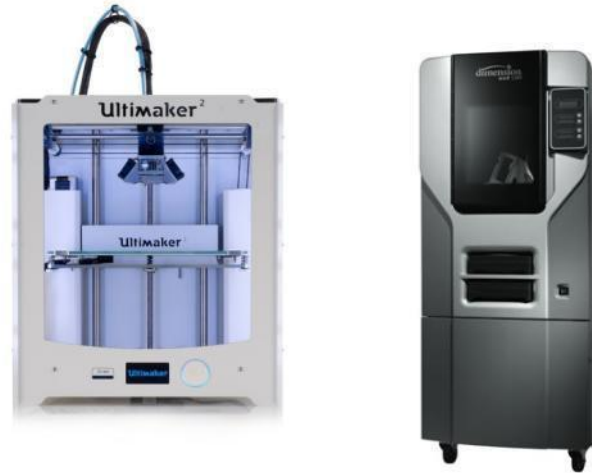
- ▼ A vinyl cutter, to produce stencils, flexible circuits, and antennas, T Shirt designs





# Fab Lab equipment

- ▼ Lots of 3D printers



- ▼ Laser Cutters



# Fab Lab equipment

- ▼ Computer-controlled sewing and embroidery machines

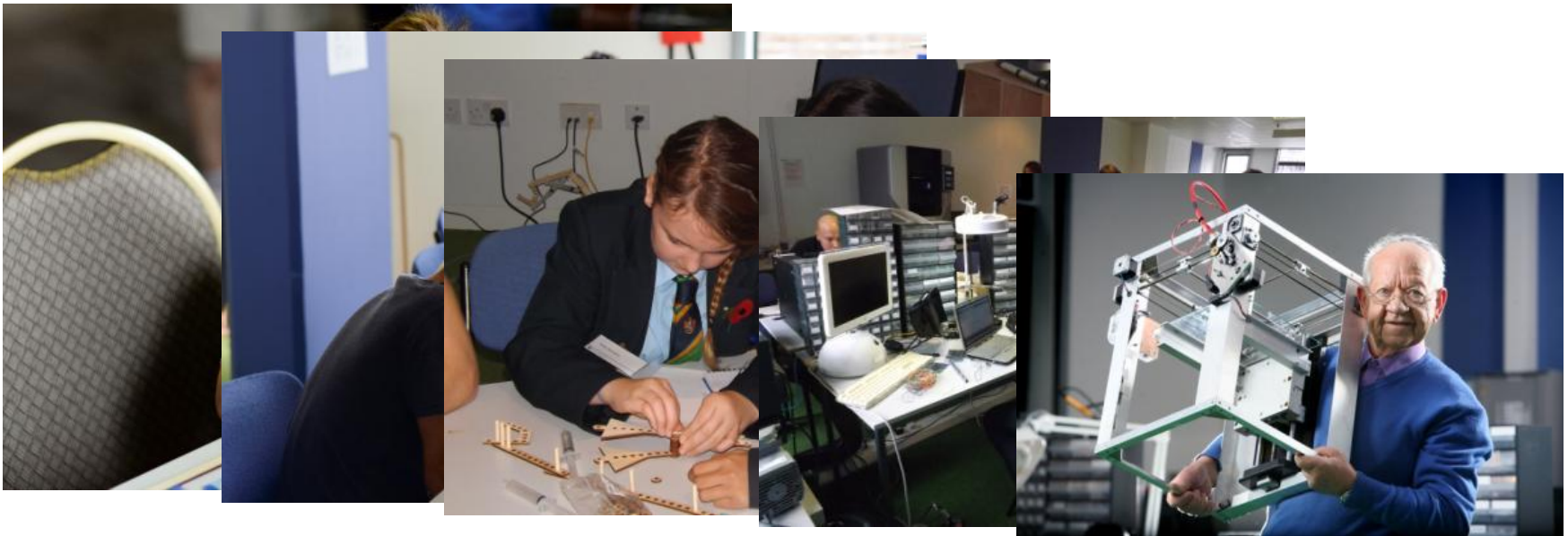


- ▼ A range of tools – hammers, saws, screwdrivers, drills, chisels etc



# Who uses Fablab

- 500 new members per year
- 2500 + visits per year
- The Public (children > students > pensioners)
- Schools, colleges, universities, companies, charities



# The Future

- Fab UK – National Association
- Accredited Apprentice Programme
- Develop Further Education Programme
- Mobile Fab Lab

# Thank you for listening