

Research Center Creating 010  
Rotterdam University of Applied Science

# OPPORTUNITIES FOR DESIGN EDUCATION?

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Aachen, September 9 2013



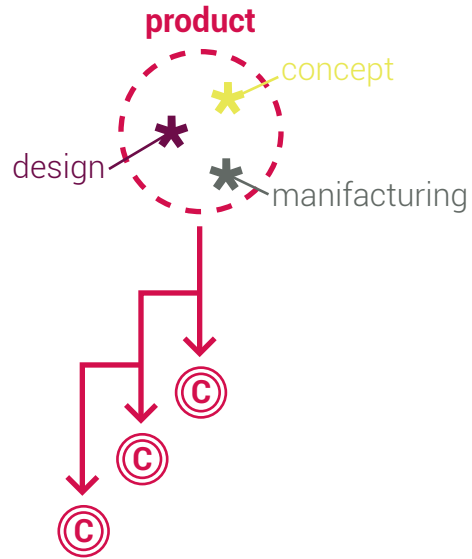
The third industrial revolution can be experienced in so-called FabLabs that empower users to 'make almost anything'. Although this does not change the need for designers to have making and prototyping skills, there is no doubt the revolution impacts the design profession in terms of skills required and design methodologies and practices.

What opportunities do FabLabs create for Design Education?

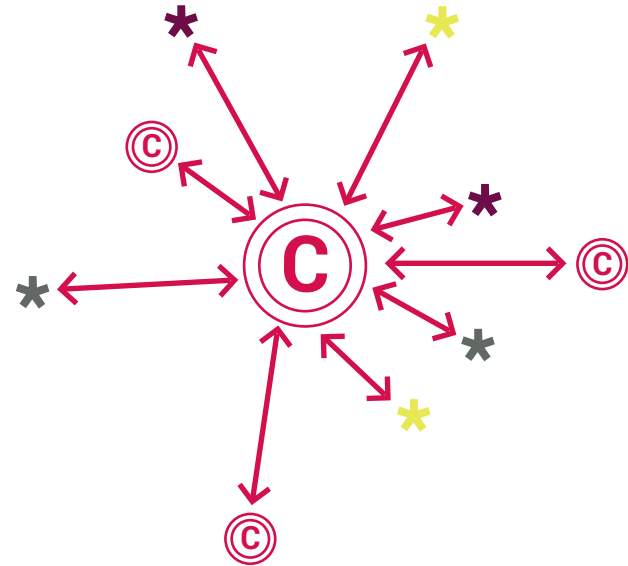
**Goal of this session**



### Traditional Product Flow



### Transformed Product Flow



© consumer    — distribution flow    \* concept / idea    \* design    \* manufacturing

Third industrial revolution



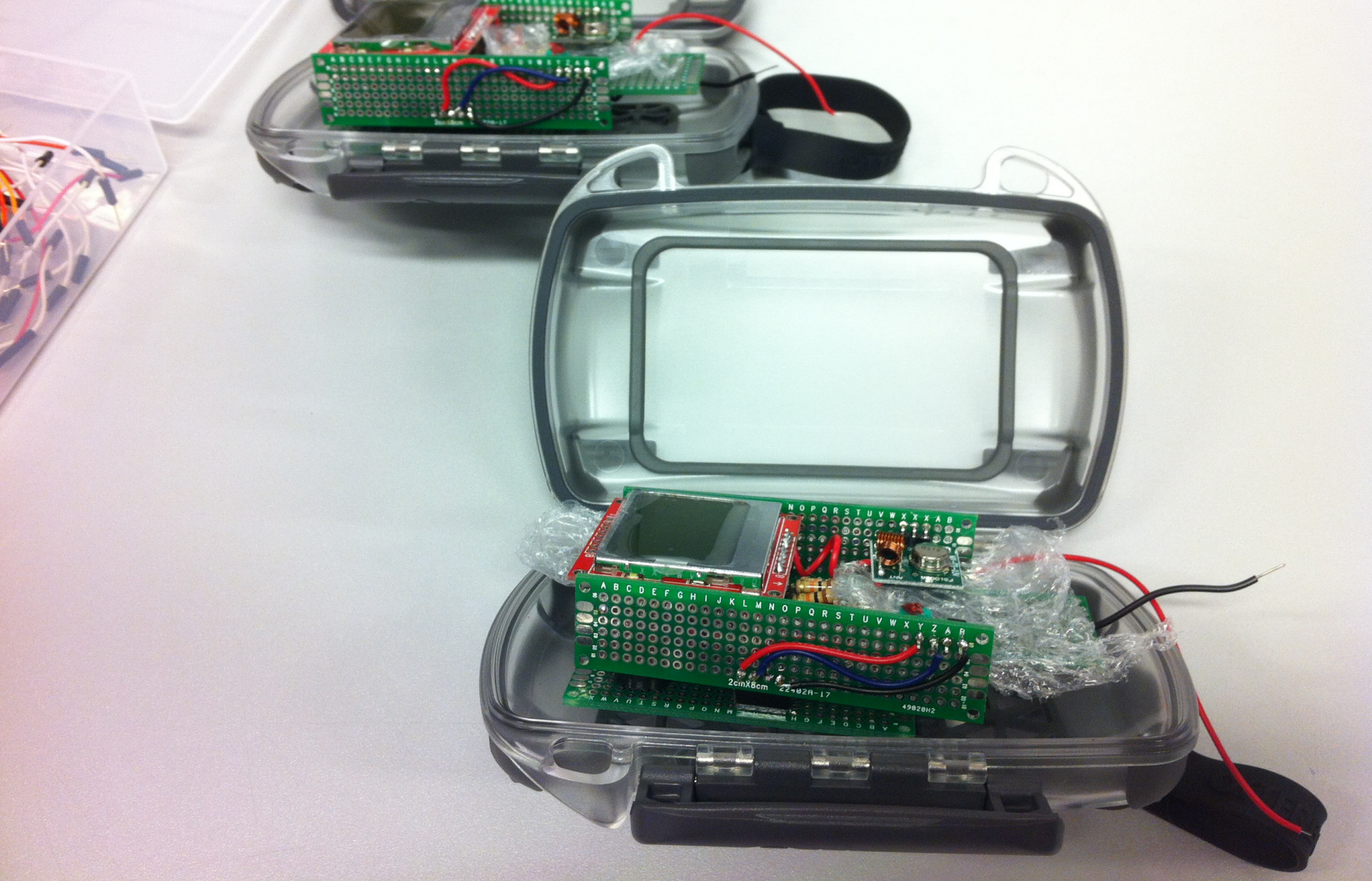


Stadslab Rotterdam (Fablab+)



**New challenges in rapid prototyping and co-creating**





**Course:** What Do You Need to Make (Almost) Anything

In this course students were asked to build their own smart object – an object using electronics and programming to create interaction. Using open source technologies students were enabled to build their own working prototype. Students would not build a perfect product, but a series of prototypes that leads to an alpha version of a smart object.

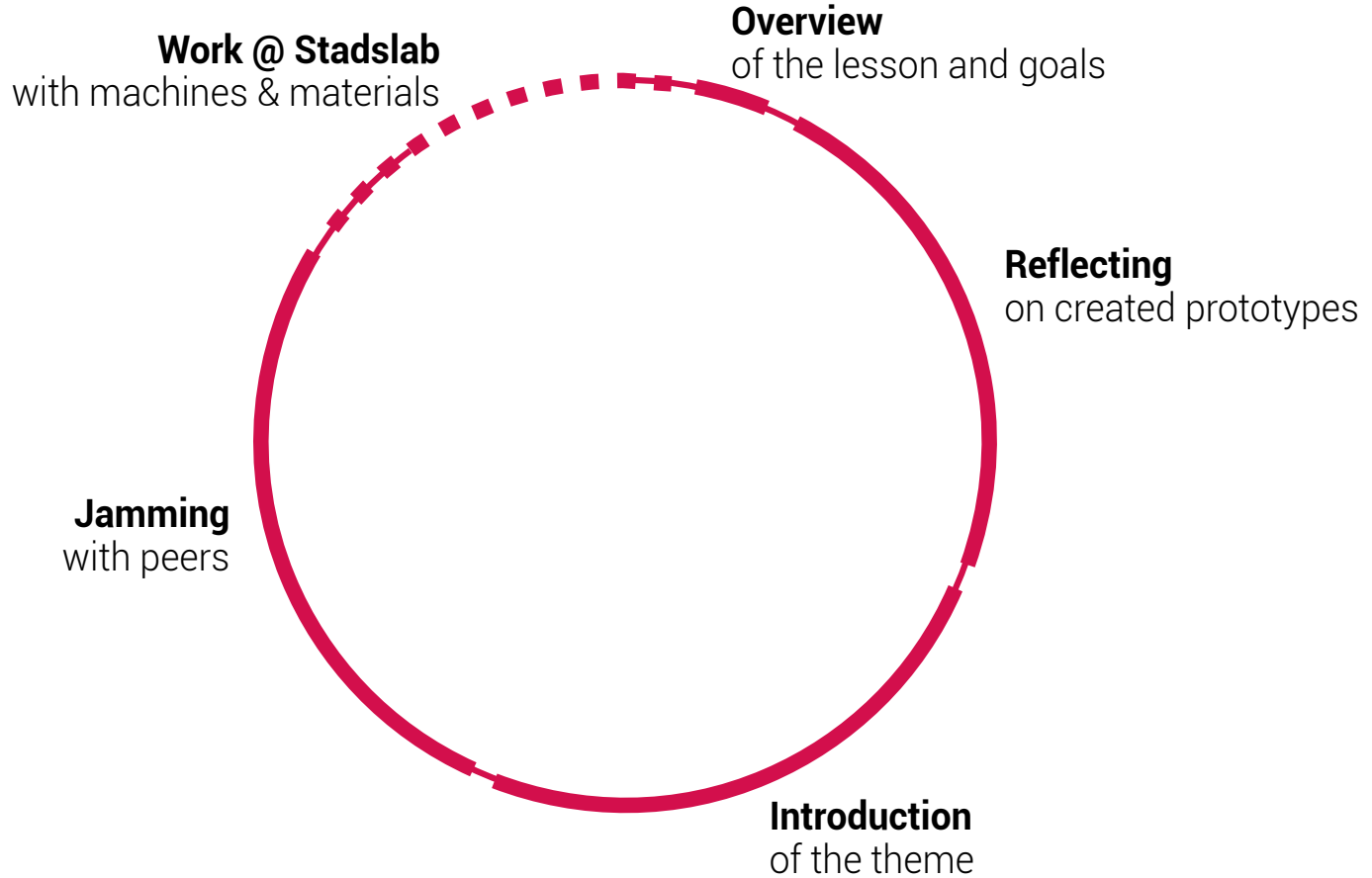
Core of the elective is to empower students by teaching them simple processes and using publicly accessible information and technology (open source) to develop prototypes with a minimal amount of time.



**Course:** What Do You Need to Make (Almost) Anything





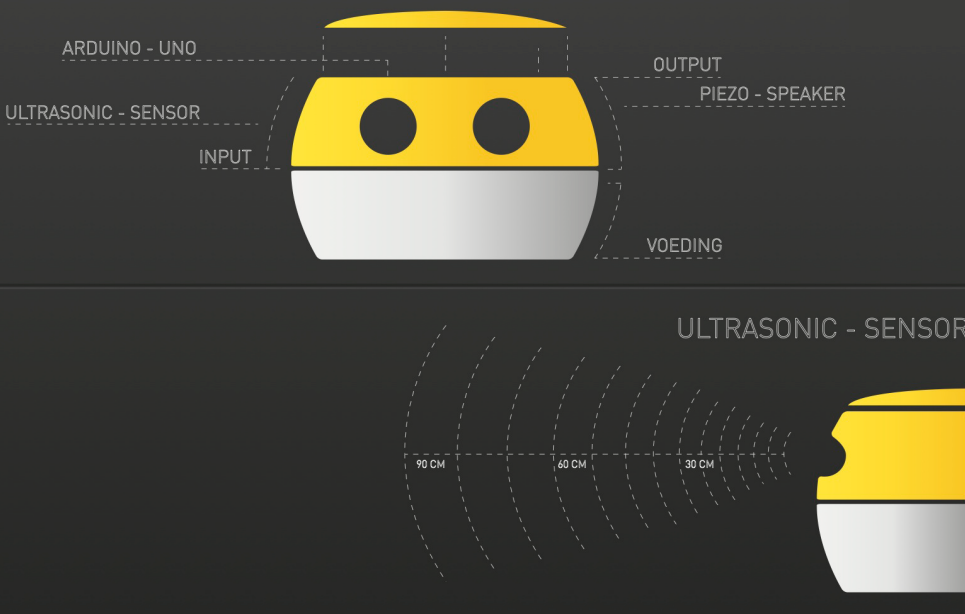
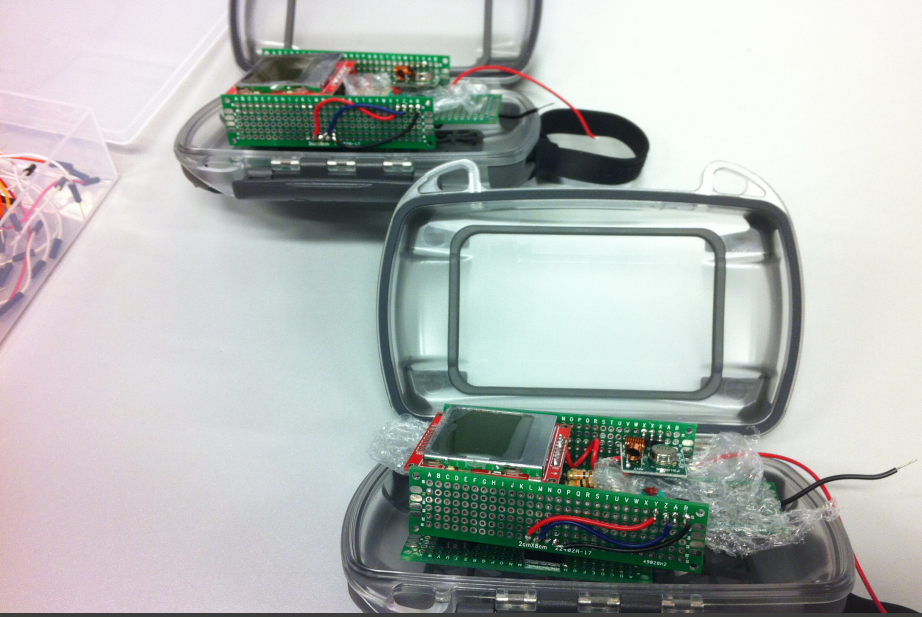


**Course:** What Do You Need to Make (Almost) Anything



## The Course

- 1) The method of agile rapid prototyping
- 2) Mechanical drawing and buildings
- 3) Circuit boards and electronics
- 4) Microcontrollers
- 5) Input and sensors
- 6) Output and activators
- 7) Communication
  
- 8) Alpha prototype
- 9) Alpha prototype
- 10) Exposition



Course: What Do You Need to Make (Almost) Anything





Other (educational) users: Minors

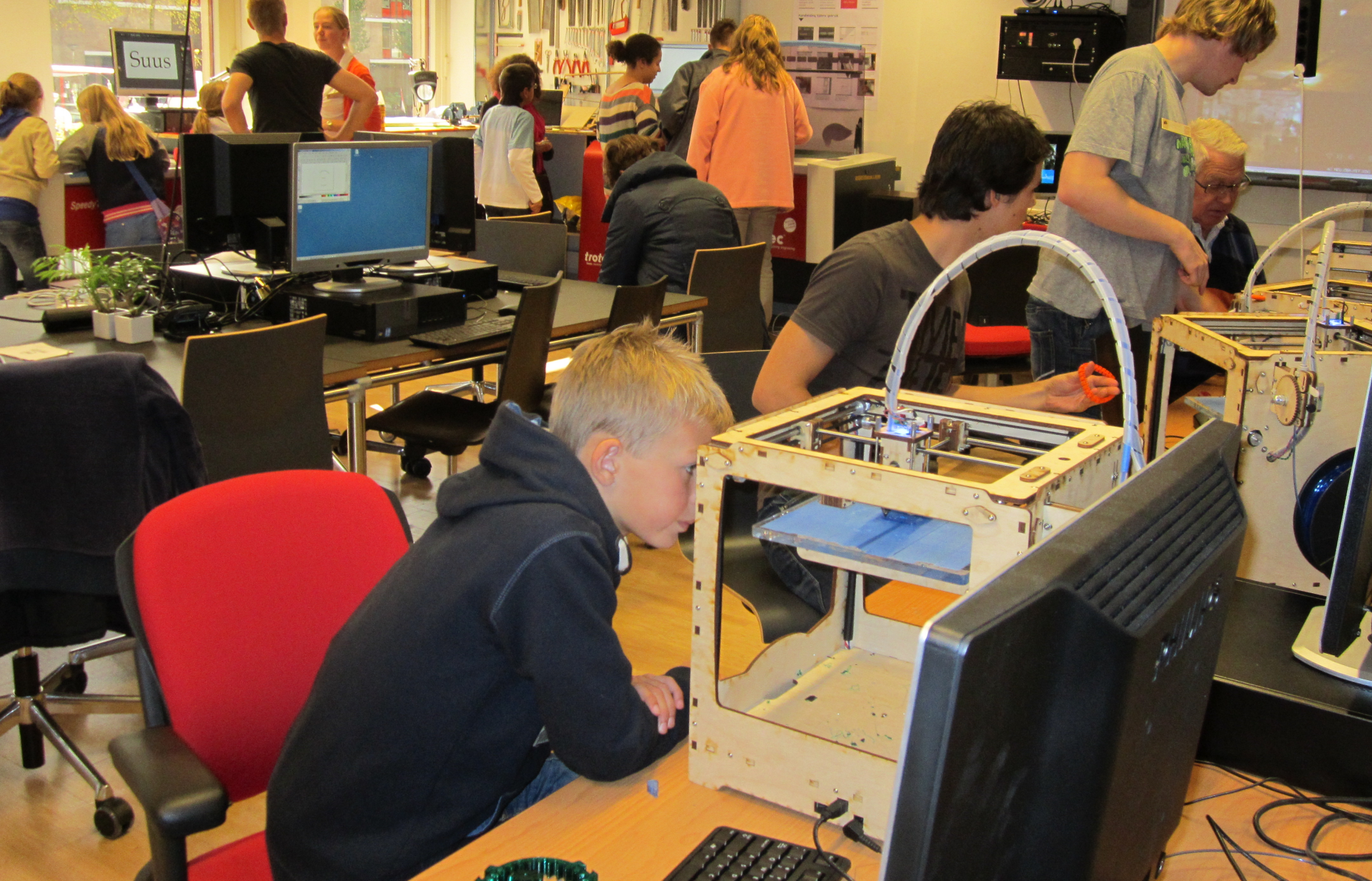


**Rediscover, Retrieve, Relive & Reinvent**



Trial workshops





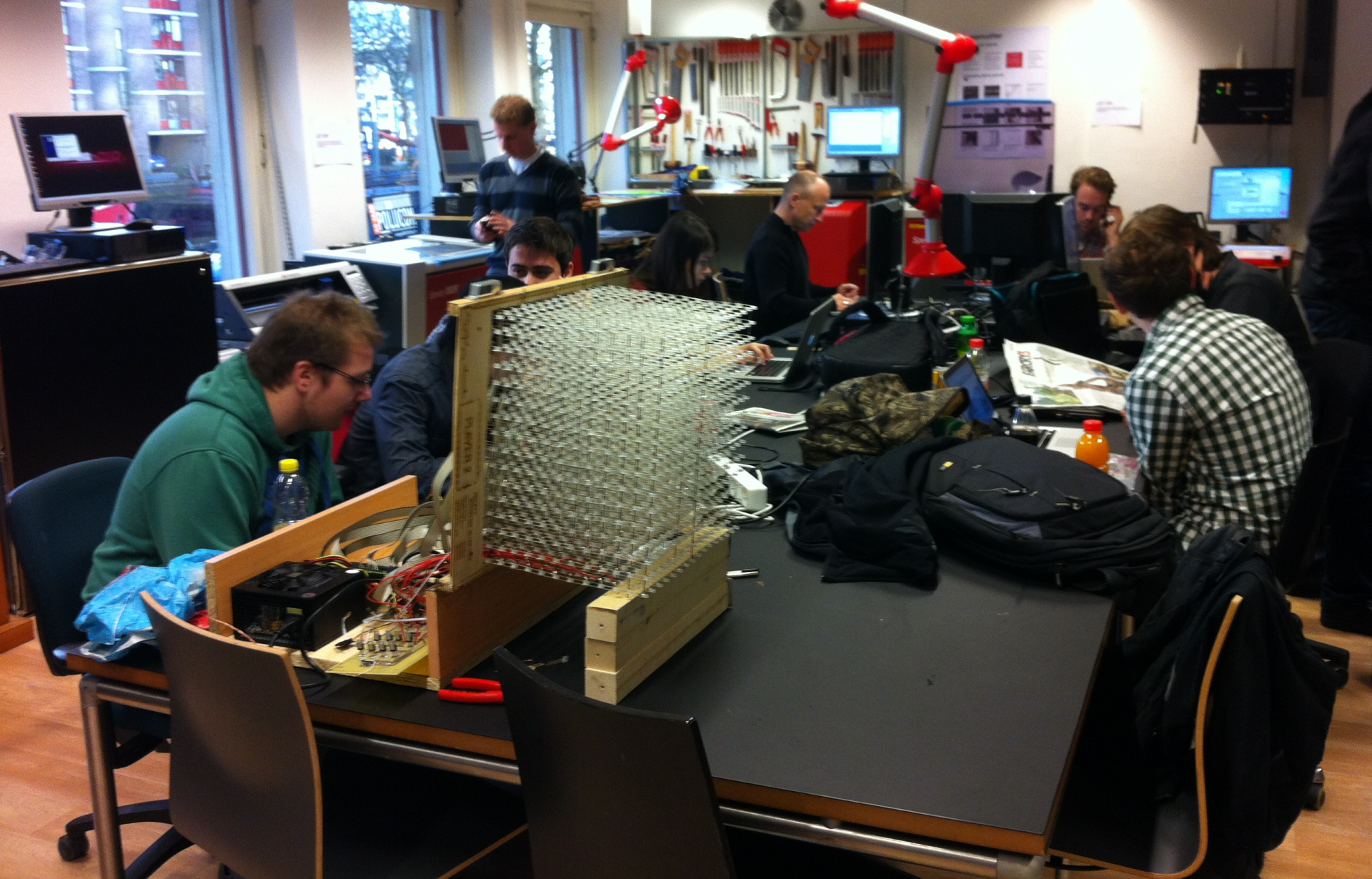
Anyone can participate



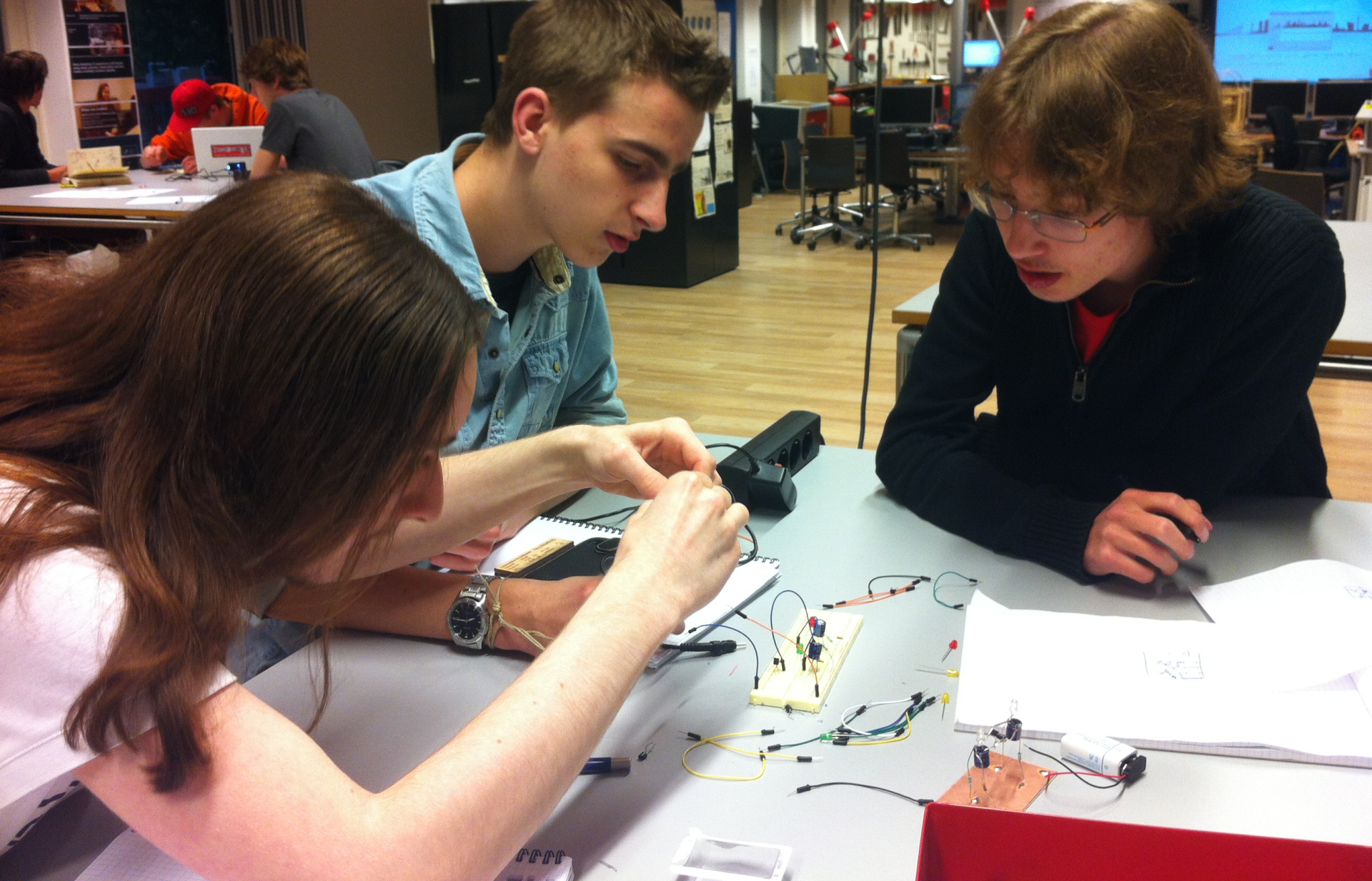
**Participatory** learning environment







**Get their hands dirty with digital production**



Peer learning





Today's challenge



(t)here is a new world unfolding and  
everyone will have to adapt<sup>1</sup>

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