

Microteaching

Title: E-waste Disassembly

Timed session plan:

- 2min: present the task, laptop and tools to students. Give a brief overview of safety.
- 10min: exploration -- participants use the worksheet to explore the laptop with minimal verbal feedback
- 6min: guided exploration -- engage the participants more in conversation, highlight points of interest and take questions
- 2min: wrap up, answer final questions, and put away tools

Learning outcomes:

- Learn about the role of standards processes in electronics manufacturing
- Identify key functional components of a laptop
- Understand a 'laptop' as the outcome of a number of political, technical and design processes

Worksheet provided to students:

task:

- using the tools provided, take the laptop apart as far as you can (because of time constraints, some of this has already been done)
- take it in turns to use the tools, and to make a note of how different parts are structured and connected

as you are disassembling, discuss the following questions:

- can you recognise some components? what role do you think they serve?
- can you identify parts that are standard, and parts that are specific to this manufacturer?
- what materials and processes do you think were used to make these different components?