Outcomes of session

- Identify the basic components of a personal computer
- Disassemble and assemble several of the basic components of a personal computer
- Develop skill in handling common tools that are used when working on computer hardware
- Become familiar with the computer hardware in the studio precinct.

Assessment

Not applicable.

Preparation required

Nil.

Activity 1: Computer hardware exploration (~ 1 hour)

In groups (the size of group depends on the number of computers available) disassemble and try to re-assemble an old personal computer. The tutor will assist you and answer any questions.

You will need to:

a. Collect a kit
b. Select one of the OLD computers on the table
c. Identify at least the following internal components: motherboard, CPU, graphics card, RAM, serial port, parallel port, power supply, power cable, hard disk drive, floppy disk drive
d. Plan how you are going to disassemble the computer
e. As you start disassembling the computer, document (write down) what you do. You can draw, photograph or scan the components as a part of the record.
f. Label each component and place it in a plastic bag.
g. Practice putting the RAM, graphics card, and cables back onto the motherboard
h. (check with the tutor to see if you can turn your reassembled computer on)

Activity 2: Computer components documentation (~ 1 hour)

In groups of two develop a simple webpage about the components, their purpose, specifications, price, web references, and list more recent products of the same component. Include safety precautions that should be followed when working with the ‘insides’ of a computer.

Activity 3: Studio computer equipment (~ 15 minutes)

Individual:

a. Document the computer hardware specifications for the studio desktop computers.
b. What operating system do they use?
c. What peripherals are available for use in the studio precinct? What procedures do you follow if you want to borrow any of them?
d. There is a radio frequency network (RF) in the studio precinct. What is a RF network? How does it work? What advantages and disadvantages can you see for their use in business?
e. What other networks are present in the studio environment? What protocols do they use?

Activity 4: Assignment 3 (remainder of time)

Use this time to work on Assignment 3