LESSON PLAN – Local Computer Basics

This section focuses on the background knowledge around the local personal computer, both in terms of hardware and software. It's expected that the student should either be familiar enough with their own experimentation or be able to take from this section a guide into growing a robust understanding of personal computers and their physical maintenance.

Overview

- Personal Introduction
- Introduction to PC Hardware
  - Functional Parts
  - Recognising Ports and Parts (see sheets)
  - Buses
- Booting
  - BIOS
  - Device Selection
  - Operating Systems Stack
- File Systems
  - Partitions Overview
  - RAID
  - Mounting
- Assembling a Computer
- Installing Ubuntu from scratch
- Partitioning a home directory
- Formatting a USB pen drive

Materials

1. Section Presentation (slides)
2. Overview Sheet
3. Identifying Ports Sheet
4. Internal Computer Parts Sheet
5. Practical and Assignment Sheet
6. Disassembled Computers
7. USB Flash Drives (1 per student)