



## Update on Training Activities by Given Sichilima

Students from Munali Secondary School participating in an ICT and AI training session. Special thanks to Munali Secondary School for their continued support and collaboration in making these sessions possible.



As part of my work with SOZ Foundation, I have been conducting regular ICT and AI-focused training sessions at **Munali Secondary School** in Lusaka, Zambia. These sessions are designed to introduce students to the foundations of computing, programming, and the application of Artificial Intelligence in technical environments.

- **Number of Schools:** 1 (Munali Secondary School)
- **School Level:** Mixed-level classes (Grades 8, 9, and 12)
- **Number of Classes:** 2
  - **Class 1:** 19–20 students (meets every **Thursday from 12:30 hrs to 14:30 hrs**)

- **Class 2:** 20 students (meets every **Friday from 09:00 hrs to 10:30 hrs**)
- **Total Students Impacted:** Approximately 39–40 students weekly
- **Frequency:** Weekly sessions

### Topics and Activities Covered

#### 1. Introduction – A New Information Revolution (*basic overview*)

- Understanding the three major technological developments driving the current information revolution:
  - **Microcomputers** embedded in devices generating massive data.
  - The **Internet of Things (IoT)**: interconnectivity of sensors, actuators, and other devices.
  - The rise of **Artificial Intelligence (AI)** to analyze large volumes of data and enable new applications.
- Discussion on the role of bulk data in AI and the security challenges in highly integrated systems.

#### 2. Raspberry Pi (RPi) – Single-Board Computers

- Introduction to Raspberry Pi as a hybrid between a controller and a general-purpose computer.
- Hands-on exercises on connecting sensors and actuators using the RPi, Python programming, and the Geany editor.
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#### 3. Artificial Intelligence Basics

- Introduction about AI and also Real-life applications of AI, IoT, and data-driven decision-making just to make students understand AI and what it is about.

### Practical Focus

Because of limited computers and varying student schedules, the students were split into two groups. Each group participates in **hands-on exercises** using Raspberry Pi computers, learning to write Python programs, interact with hardware, and understand how intelligent sensors and actuators communicate with central systems.

These sessions inspire students to see how computers are integrated into real-world systems and introduce them to future-oriented technologies such as IoT and AI.

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The initiative aims to lay a strong foundation for ICT literacy and spark interest in technical fields among the students.

**Students from Munali Secondary School during hands-on ICT and AI training sessions.**



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