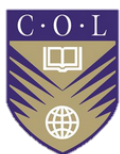


### *About The Commonwealth of Learning*

The Commonwealth of Learning (COL) is an intergovernmental organisation created by Commonwealth Heads of Government to encourage the development and sharing of open learning/distance education knowledge, resources and technologies. COL is helping developing nations improve access to quality education and training.



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# Aptus



*A classroom without walls*

*How can these learners under a tree in Central Africa access online learning resources?*

Commonwealth of Learning believes that it is possible to reach the unreached through the use of appropriate and affordable technologies. The Aptus Classroom Without Walls is an exciting innovation that can transform the teaching-learning experience everywhere it is used - even under a tree in a remote resource-poor location.

### Availability

Over the last 18 months, prices of unbranded Tablets have come down to \$ 50-75, while the computing power and memory have increased by 200%. Many countries have launched Tablet distribution projects on mass scale, such as Akash in India; mass distribution of low cost laptops in Uttar Pradesh State, India; Prathom1 in Thailand; Presidential Laptop Distribution Project in Kenya.

### Affordability

The Mini-PC, a new type of device, comes at the affordable price of US\$ 60-70. Most have the same computing power as an entry level server of five years ago, when the cost on average, exceeded US\$ 2000. The increased availability of affordable solar chargers supports the use of these devices. This is an extremely important development.



We can re-purpose the Android Mini PC to act as a server capable of hosting content that can be shared via the wireless network with learners. The Android Mini-PC can run effectively on battery power from a power bank (there is one contained in the wireless router) that can be recharged a solar charger. Together these two devices cost just under \$100 and form the core of the Aplus Classroom Without Walls.

PULL FROM PRESENTATION BOX  
DIAGRAM WITH LABELS OF DEVICES

### Device Specifications

#### Hardware

##### Wireless Router

- Supports up to 20 wireless devices, such as laptop, tablet, and/or smartphone.
- Covers up to 25 metre radius.
- Up to 10 hours of battery life (2hrs TPLink 1; 24hrs TPLink 2)
- Solar power charging can be easily added (at an extra cost).

##### Android MiniPC (MK802iv Quad Core)

- Supports external micro SD Cards up to 32 GB.
- Supports mini HDMI output, allowing connection to a pico projector or monitor.

#### Software

- Open source operating system: Debian Linux 13.04 or above.
- Supports open course content management systems (CMS), such as Drupal and/or Wordpress.
- Supports learning management systems (LMS), such as Moodle.

#### Content

- Approx. 2000 Khan Academy videos.
- 6000 articles and 50, 000 images from Wikipedia for Schools.
- Wordpress content management system.
- Moodle learning management system.
- OwnCloud file sharing application.

#### Cost

- \$60-70 USD for MiniPC