

Kyalami's Beaulieu College, Johannesburg, South Africa

"ELe[®] has delivered a computing solution for our students that was simple to install and has delivered enhanced, reliable computing capability at a fraction of the energy consumption"

**David Rogers – Educational Technology Co-ordinator,
Kyalami Schools**



Our client's challenge

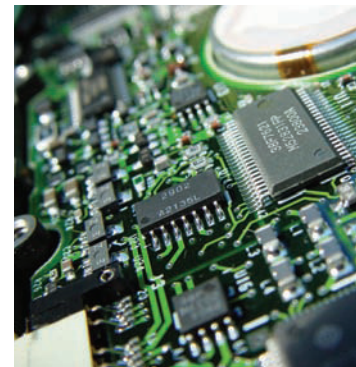
Having tried thin-client processors to save energy, the school found them unsuitable for their demanding curriculum. When looking to expand their ICT facilities, they were concerned about the impact more PCs and subsequent air-conditioning requirements would have on their energy usage.

Addressing the additional issue of load shedding and power outages, which regularly disrupted teaching and caused frustrating loss of work, was also an important priority. The room identified for the new ICT suite had few AC plug sockets and would require either cumbersome multi-plug cabling or costly electrical work.

The ELe[®] solution

In collaboration with local technology partner Regenergy, ELe's ultra-low energy computing powered by a lithium energy pod was installed at the school, including:

- 28 Intel[®] i3 quad-core fat-client PCs, operating on Windows 10
- All with 19" widescreen low-energy monitors
- Direct battery power – no need for AC/DC converters or external power supplies
- Power distribution deployed via the school's existing CAT5e ethernet network – no additional re-wiring or electrical work was required.



The results

Beaulieu College was able to run their whole ICT suite for less than 700 Watts. This was equivalent to 3 or 4 of the schools previous PCs and a reduction of around 87% in energy consumption.

With no AC/DC power conversion required and PCs without fans or moving parts, system failures and subsequent maintenance requirements have been virtually eliminated.

For Beaulieu's teachers and students, the reduced noise and heat of their ELe[®] technologies has created a more peaceful, ambient and productive learning environment.