

# ONE TREE HILL COLLEGE



Formerly known as Penrose High School, One Tree Hill College changed its name in 2008 and underwent a major, \$15 million, property development project. Amongst all of this tumultuous change the technology team was facing problems of its own.

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Lance Karena, ICT Manager, One Tree Hill College



## THE ISSUE

ICT Manager Lance Karena describes a scene that will be familiar to many older secondary schools. "We had a disparate network that spread across 4-5 domains supporting a number of functional, but old, machines. Password access was only applicable to individual domains; requiring multiple passwords for multiple users. In the end we often had whole groups of kids with the same log-in and password just to make it work. It was way behind what could be considered 'good practice', explains Lance.

"Outages were a regular feature and the technical team had to work incredibly hard just to keep the system running. Because the network was so unreliable users were reluctant to trust the information available on the network and tended to blame the various applications. Teachers often resisted using the system or trying anything new out on it. It sounds funny now but there were teachers threatening to kick their PC or throw it out the window in sheer frustration – something the ICT team shared."

The school developed a five year Strategic Plan, but before we could set about delivering any of the ICT components we desperately needed to upgrade the network. Cabling experts came and took a look at our in-ground infrastructure and determined that although we had fibre-optic cable through the school it was relatively old and brittle and needed to be upgraded along with the network.

As all of this coincided with the school's rebuilding project it created a number of challenges for anyone taking the job on. Not only were we asking the successful contractor to work while most of the school was being dug up and rebuilt; we were asking them to upgrade the network and still utilise all of our existing hardware (inefficient as it might be). We considered two or three proposals but it was New Era IT who took on the job.

## THE SOLUTION

"They started with a comprehensive review of what we had. They examined the six servers across the school including a Pentium2 that we had turned into a server and our back-up system which largely followed a "cut and paste" format." Facilitated by the account manager, who had overall responsibility for the project, New Era IT looked at every aspect of One Tree Hill College's ICT infrastructure including the internet access, email, student management system, switching, wireless and the hardware and software we were using. Lance admitted that this in itself was a "major undertaking."

New Era IT undertook the upgrade over the school holidays while a full construction team was also at work across the school. One Tree Hill College now sports a server frame with ten Acer Altus 520 Servers with two core switching units which lead onto managed switches. There is upgraded fibre optic cabling across five areas of the school giving high-speed delivery of services. All of this is remotely accessible via desktop making the daily management and maintenance much easier. "We also operate on a single domain enabling us to give individual logins for every single student across all of the relevant systems; something that was impossible to achieve before." says Lance Karena. "We have also networked all of our large photocopiers and printers enabling a much more efficient use of resources."

"Users now trust the system. It works every time they log on and they can trust the database and resources it supports. I would estimate that our Student Management system is now 80% more reliable than it was before and continues to improve as more information is updated. No longer are teachers frustrated by the network preventing them from delivering

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tasks or reports to deadline – even the most adamant luddite is being converted."

## THE CHALLENGES

"As a software engineer I know just how difficult the job was that New Era IT had to do and they did an excellent job, completing it in an extremely difficult working environment and within a very tight time frame," says Lance Karena. He also sees the project as having created a unique benchmarking case. "Because the network was the only thing that changed, we were able to see how real the improvement in performance was. Anybody could have got an improvement in performance by replacing the old computers with new ones, but to retain the old computers and still see such a big improvement in performance was really exciting."

## WHAT NEXT?

"Overall I found the New Era IT engineers helpful and easy to get on with. I never had a problem with them understanding what was needed and that is a relationship which continues to develop even though the upgrade is complete."

The College received an excellent Education Review Office report in 2009, on which Principal Iva Ropati commented; "Management systems and teaching practices have greatly improved and, with the strong support and governance from the Board of Trustees, the college has entered an important phase of renewal in its 54-year history." Mr Ropati said for the first time in five years the college roll had increased sharply - up by more than 100 students since 2008 - reflecting achievements across the board.

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Iva Ropati, Principal, One Tree Hill College (commenting on a recent ERO report).

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