

## Case Study

# Managed Services helping Peter Moyes deliver on IT strategy



### Introduction

Helping build the classrooms of tomorrow is a joint effort between Peter Moyes Anglican Community School and Civica, a market leader in education software, technology and outsourcing services.

Established by the Anglican Schools Commission in 2000, Peter Moyes today educates more than 1,600 students across Primary, Middle and Senior Schools at its campus north of Perth.

The development of the school's information, communication and technology environment is seen as critical to helping enhance learning and forms part of its on-going strategy.

Civica has worked closely with the West Australian school since becoming the managed service provider in 2012. The company's responsibilities range from on-site maintenance and support, to maintaining Civica iWise and Maze school management platforms.

The Civica consultants also work closely with the school to help it meet its vision for the future. In 2012, they helped develop a five-year strategy which would propel the school to the front of information, communication and technology in the education sector and improve the services to the wider Peter Moyes community.

Mr Philip Cartwright, Business Manager, Peter Moyes Anglican Community School said the effective integration of technology was critical to academic development.

"We believe that better technology provides a better overall learning experience for students and teachers. It is critical that we provide and maintain solutions that help our school meet our broader strategic goals," Mr Cartwright said.

"We work closely with Civica to ensure we're at the forefront of sustainable technology innovation and continue to modernise the classroom experience."

### The challenge

The growth of portable devices and networked software applications has been rapidly transforming the Australian classroom. Today, most modern classrooms boast digital learning tools to stimulate and engage students, whenever and wherever they might be within the school.

The concept of the wireless classroom has been rapidly embraced by academics. Research by the University of Melbourne found that the wireless classroom substantially influenced teachers' approach to teaching – from how they activated student learning, through to socialisation and interaction.

Yet supporting this "always connected" learning environment is a huge undertaking. Civica has four full time staff working at Peter Moyes as part of its managed services solution.

They oversee an environment that includes more than 1,300 laptops and desktop PCs, 25 virtual servers, three ESX hosts and two 50-terabyte iSCSI capable Storage Area Network (SAN) storage devices.

### Unified network architecture

More recently, Civica has worked extensively with the school to develop a unified wireless and wired network to provide connectivity to students, teachers and visitors throughout classrooms, offices and school grounds.

The network covers an area of more than 100,000 square metres, including classrooms, administration buildings, libraries, scientific labs and recreation areas.

The network needs to be accessible to students in classrooms, as well as while moving around campus, and an additional wireless network also runs for school visitors. The network averages around 600 concurrent sessions on the wireless network, with other devices connected via the wired environment.

"In terms of network load, the school has similar benchmarks to a large private organisation. There are an extremely wide range of use-case scenarios and we continually need to ensure the wireless networks operate at optimal performance and provide the best possible service to students and staff," said Simon Jones, Managing Director, Education at Civica.

## Noisy air

One of the challenges the Civica team had to help Peter Moyes overcome was improving connection speeds in a very 'noisy' wireless environment. Interference meant that speeds would routinely drop to around 1MBps and trigger unnecessary connection drop-outs.

The Civica team spent weeks studying the air environment in a bid to improve connection quality. The study identified a nearby radio transmission tower as the source of the school's connection problems, something that had gone undiagnosed in the past.

To overcome this interference Civica configured and deployed new dual-band connection points in new locations throughout the school. The consultants also configured client connection criteria for communicating optimisation vectors to and from the Wireless LAN Controller, as well as deploying other techniques to lessen the effect of noise on the wireless signal.

Today the school uses more than 100 Cisco 3700 series Access Point devices spread throughout the school, as well as two Cisco 5508 wireless high-availability LAN controllers. The noise mitigation techniques and network deployments have seen data transfer rates of up to 40MBps.

The Peter Moyes wireless network has also had other improvements such as seamless roaming, storm traffic control and proactive coverage hole detection and beam forming.

It has also meant that different purpose devices or applications like Apple tablets, projectors, printers and internet-enabled TVs now can work under the same wireless infrastructure and can be accessed from anywhere on the network with the same seamless connectivity.

## Device preparedness

Another significant project for the Civica managed services team has been the provisioning and maintenance of student, teacher and school devices.

Peter Moyes currently offers personal laptops for the Years Four, Seven, Eight, Nine and Ten, and being rolled out to Years five, Six, Eleven and Twelve in 2017 and 2018 respectively, including all the required educational software.

This means the start of the school year sees more than 500 new devices purchased and configured for students and every third year 100 replacement staff devices.

Civica works with Peter Moyes six months prior to beginning the school year to assess the suitability of new devices for students – from PC laptops through to iPads, iPods and other tablets.

According to Richard Cackett, teacher and ICT Coordinator at Peter Moyes, equipping so many students and teachers with the right technology is no easy task.

"We need durable technology solutions that enhance the learning experience, as well as provide a high level of performance. Picking and maintaining these devices is a time consuming but important role, as students and teachers are heavily reliant on them," he said.

"We need to take in a wide range of factors when selecting devices – from performance and battery life, through to

whether they'll be too heavy for younger students or able to fit into a backpack."

Once provisioned Civica's on-school team is also responsible for providing ongoing technology support including maintaining updates, security software and repairs. The help desk deals with 3,000-4,000 requests a year, many of which now include proactive software and system updates.

Civica's Simon Jones said "The shift to a more proactive approach was one of the biggest achievements of the managed services team to date."

"It's important to the school that we're able to anticipate potential problems before they occur. Even relatively small disruptions to the network can be hugely detrimental to the learning experience."

"During the past few years we've seen a significant increase in the number of potential issues that we've been able to intercept before they've become problematic. A lot of that is down to the strong collaborative partnership we have with Peter Moyes stakeholders throughout the school."

## Using MAZE and Civica iWise

As the school uses the Maze and Civica iWise school management systems parents are able to access the online portal for services such as checking up on homework requirements, paying tuition fees and receiving updates about school events.

Maze provides access to appropriate information and functions to all members of the school community, including school administrators, school leaders, academic staff and parents. The parent portal has been designed to be intuitive and support parents with web-based access to the key tools and processes they need to be engaged with the school. Maze also assists Peter Moyes in efficiently managing all back office processes in one integrated system.

Civica iWise is a comprehensive web based student information system with a rich set of administration tools. It also integrates with a range of school management systems including Maze and with a number of third party packages including timetabling packages and learning management systems.

## Summary

The close partnership between Peter Moyes and Civica is helping the school meet its long-term strategic objectives through milestone projects such as the improved wireless network and device rollout program.

The increasingly proactive approach taken by the Civica managed services teams also reduces potential disruption, whilst also allowing the school to focus on forward-looking information communication and technology projects.

Having successfully tackled the wireless classroom, Peter Moyes is well placed to move on to new technological and academic challenges