

Victorian primary wins sustainability award

The new St Macartan's is based on passive design principles, using low-embodied energy materials



St Macartan's, winner of the 2008 Sustainable School Award for Catholic Schools, has been developed to provide an environmentally sustainable, energy efficient learning environment affording warmth, shade... and learning areas that integrate with the outdoors.

The 500-student primary school moved into its new four-hectare campus in Mornington, a 60-minute drive down Port Philip Bay from Melbourne, in April.

Principal Marie Slattery told Education Today that a detailed plan enabled a smooth move to the new site. "I wanted to be sure we could just walk in and pick up a pen and start work," she said.

The move from the school's magnificent cliff top site overlooking Port Philip was quite an emotional wrench, but after 111 years, there was no further room to grow and the old building was both expensive to maintain and hard to heat.

The new campus backs onto Padua College, where many of St Macartan's students move to for their secondary years. Parents with children at both schools are enjoying one-stop drop offs and after school pick-ups, Mrs Slattery says. And, while the grass grows, the primary students have

access to the Padua College oval.

For architect Sandy Law, of Law Architects (formerly Graeme Law and Associates) St Macartan's was an interesting project and a dream job.

"Everyone involved wanted to create something special, based on passive design principles and using low-embodied energy materials," she explained.

"In the early days, we spent a long time building a quality relationship with the client and establishing a strong level of trust and ease of communication as to how the school might operate and what flows there needed to be, and what the teaching and learning practise was all about.

"We needed to know how they saw themselves moving forward in a contemporary teaching and learning environment."

The whole project was several years in the making, with the focus on sustainable education through which students would become aware of environmental issues such as water, energy efficiency and waste management.

The school's classrooms are grouped in several small neighbourhoods containing pods of junior, middle and senior grades. In turn, the pods wrap



Buildings at St Macartan's are functional and enviro-friendly

around a large central piazza that allows for much greater interaction between grades than was possible in the old school. There is also a large multi-purpose area connecting to a music room, art studio, library and language centre.

Each pod is autonomous, with harvested rainwater used to flush the toilets and a building management system controlling the temperature and lighting.

A 5.44 kW solar grid is linked to a data logger that provides information to a data network for student use. Information provided includes sun strength and details on the energy produced on a daily, monthly and yearly basis.

The \$400,000 landscaping budget was spent



on playgrounds, pathways and arched bridges crossing swales (dry creek beds) that flow into a retarding basin, which the school hopes to turn into a wetland.

Adding to the school's green credentials is the sustainability centre, with a chook shed, vegetable garden and citrus grove, all looked after by the children.

Before the school moved to its award-winning campus, each child planted something in the gardens. Families were included too, donating trees and receiving in return a picture and a plaque describing their tree.

"It's a beautiful environment and because the children had a fair bit to do with the school themselves, it is immaculate," Mrs Slattery said. "We don't have rubbish bins and there isn't a paper outside. It's more than just making a rule not to litter, and we did, but there is a real pride among the children as to what their school stands for."

Paper, and scraps for the chooks, are collected in recycling bins, while food wrapper waste has been eliminated by students bringing lunch to school in plastic containers.

Student leaders, equipped with sustainability pamphlets, proudly show prospective parents around their new school, pointing out the solar panels, thermal chimneys, wind direction and speed monitors on buildings, water tanks and swales and explaining how each innovation will save money and the planet.

"Once all of the grids are in place, the children will be plotting how much waste is being recycled, how much electricity we are saving and how much less water we are using so it's a real learning environment that is a little different to the norm," Mrs Slattery said.

She believes this different form of learning will help the students embrace the 21st century in terms of what they need to know to help sustain the world as they become adults and what control they have over their own destiny.

St Macartan's green program has not gone



unnoticed. The school is currently competing in The GreenHouse Games, an eight-week competition between selected Victorian primary and secondary schools where families take action at home to save energy and water and reduce waste. The competition commenced on 20th July and will finish on 13th September.

Visit www.macartan.melb.catholic.edu.au

Education facility planners award

In August, St Macartan's School received news of a Highly Commended Award in the Council of Educational Facility Planners International Victorian Chapter 2009 Awards for Outstanding School Facilities.

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