

# Warrnambool College Science and Language Centre

Architect:  
**NOW Architecture**

Project Address:  
**Grafton Road,  
Warrnambool VIC 3280**

Project Cost:  
**\$1.97 m**

Occupation Date:  
**January 2012**

Capacity:  
**1000**

Year Levels:  
**7-12**

The way a place of learning presents itself to the community has a major impact on public perceptions of the quality of education within. Warrnambool College has always been a strong investor in education programs and internal facilities, but for many years has not had the capital to invest in a major project. The new Science and Language Centre (SLC) supports these progressive programs and is a critical outward and visible sign of the excellence being fostered throughout Warrnambool College.

The two-storey SLC is proudly visible from Grafton Road and forms a new entry to the College. It adds value beyond the pedagogical brief with every visitor to the School now entering through this modern, sustainable building which enhances the image of the entire College. The constraint of the steep site levels was transformed into an opportunity to provide ground level access to both levels of the building. This provides universal access, with levels connected internally via a future lift as well as a bright and open 'DNA double helix' stair.

The Language and Seminar spaces on the lower floor are configured for maximum adaptability. The Audio booth provides dedicated acoustically separate space for language exercises as well as a facility supporting regional education links. Sliding partitions allow spaces to connect or separate to support various teaching and learning exercises, as well as flexible teaching modes. At its most open, these spaces provide an assembly area for up to 150 students - the size of a typical year level.

Science laboratories on the upper level push conventions by adopting a similar approach

to open space and team teaching as the seminar spaces below. Strategically placed glazing allows supervision between the labs while also defining learning areas. The Prep Room also provides supervision as transparent but secure part of the learning environment. Rotating stainless steel benches allow the labs to be rapidly reconfigured to support different activities - towards the teacher for instruction, in the round for a demonstration, clustered for group work.

Natural light and ventilation permeates both levels. An integrated passive heating and cooling system is driven by the thermal chimney that defines the main north facade. In winter the thermal chimney captures heat like a greenhouse. By closing the vents at the top of the chimney and opening windows into the void, users bring this collected warmth into the learning areas. This is supported by an efficient in-slab radiant heating system. In summer, the top thermal chimney vents open to evacuate the rising heat. This drives the intake of replacement air cooled by the stormwater retention pond (filled from a rock waterfall) on the sheltered south side. Two solar powered fountains provide evaporative coolth through the south windows.

A 14 panel, 2.3kW PV array is a feature and operated optimally on the north thermal chimney facade and expresses the school's commitment to sustainability, science and technology.

These passive and active elements have a significant impact on ongoing operation costs and will release budget each year for educational programs.

