

### architect's statement

Fitzroy High School is the school community that dug in. They are a force to be reckoned with. To us they seemed forged by their past with an attitude that they still maintain: stay true to what you aspire to until you realise it.

They believed in a better way of teaching and they made it happen. They believed that their emphasis on the arts makes them profoundly different; it does. Their educational rationale is elaborate and erudite. They selected us as architects, sensing that we would listen to them. They put their belief in us. They even applauded our presentations.

Architecture is necessarily complex, yet from a client's perspective this is not always the case. Here, for our client, the new senior school effectively boiled down to a couple of things.

Internally, the building's spaces and their arrangement were to be an active partner in improving the educational outcomes of the young people it served. Externally, the building was to communicate to the larger community what it believed itself to be. As one parent succinctly put it, this building needed to have a bit of 'zing'. All else were givens.

And so to find a kind of hand-in-glove response to these two requirements – a shape and space that reflected their use, yet appeared profoundly different – was more than just a little satisfying. To the outside observer it is a building slavishly designed from an external perspective. To the inside occupier, vice versa. Both are right. Both are wrong. This is what a wall can do. This building is little more, and little less. A wall.



# NEW WAVE

A new school by **McBride Charles Ryan** applies a deceptively simple solution to contain a complex and progressive educational program.

**project**

Fitzroy High School

**architect**

McBride Charles Ryan

**photography**

John Gollings

**review**

Stuart Harrison





## NEW WAVE

### /01

Reminiscent of Aalto's famous vase, the new addition to Fitzroy High School is proving to be something of an icon in its own right, featuring on local government TV campaigns.

### /02

Two bands of fenestration per level work to 'upscale' the building visually.

### /03

From its prominent corner site, the new addition commands a strong presence in the streetscape.

### review: fitzroy high school

"The difference between concave and convex is easy," my teacher used to say. "Concave is like a cave, something you can go into." The Year 11 and 12 students of Fitzroy High School in inner suburban Melbourne now occupy an essay in this mathematical description of surface – one that is also a very simple but very clever building.

Closed by the Kennett Government in 1992, Fitzroy High School was subsequently reopened in 2004 following a local lobbying campaign directed at the Labor Bracks Government – it underwent renovation and minor extensions at the time by Hayball Leonard Stent. Following a decision to extend facilities to cater for Year 11 and 12, McBride Charles Ryan (MCR) was asked to develop a methodology for expansion in conjunction with the school and its principal, Tim Fitzgerald, and the design as now built was developed in 2007.

The built extension is a remarkable contribution to both this local high school and the current debate around contemporary education space. The tall exterior wall of MCR's addition moves in and out, defining multiple shallow 'caves', like a gigantic version of Alvar Aalto's famous vase. Indeed, the connections to Aalto extend beyond these similarities: in the building's use of 'wave' form, its engagement with the notion of the public institution, its use of brickwork and in the tension between the expressive and the orthogonal.

The new work's regular base is formed by the 1960s building onto which it has been grafted – a structure that is itself an extension of the original 1915 late Federation school building, which still forms the primary entry to the campus. The school enjoys a corner site and the new building is visible from both the original approach and, more directly, from Michael Street, onto which it fronts. It commands a strong but dignified presence, brazenly augmenting the surrounding streetscape of native trees, burnt summer grasses and late turn of the century worker housing.

A long patterned wall is wrapped to form a 'hand and finger' shape for the building's footprint. The short 'fingers' of the plan create concave niches that foster smaller group learning activities. Internally, these spaces become enclosed rooms through a similar principle to that of the hospital bed curtain. The use of full-height curtains allows classrooms to become either separate 'rooms' or one big space. This satisfies the criteria of 'Mode 2' learning – a pedagogical framework that places an emphasis on group learning in small, flexible teams (see AR113, page 68).

The curved wall of the building was considered as an unfurled surface that then undergoes bending and the use of a graphic pattern here continues an interest MCR developed at Templestowe Park Primary (2004). Recalling the Olympic Stripe school notebook, the black and orange vertical striped façade at Templestowe was achieved with painted FC sheet; here the



**/04**  
The inside face of the curved walls are painted white, which allows light to bounce around this flexible 'cave'.

**/05**  
Internal materials are robust – here, chainlink fencing stands in for a balustrade.

**/06**  
The ground floor works as both exhibition area and lab class, with tilt-up glazed doors facilitating flexibility.

pattern is 'built' through different block areas of brickwork – making it more permanent and less likely to be changed in the future. The compositional system is keyed in with the windows, which align in two bands of fenestration per storey – 'up-scaling' the impression of the building from the outside. One band of windows is suited to sitting while the higher windows add ventilation and additional light and views. This is possible as the ceilings are tall – 3.7 metres, a result of matching the heights to the existing building and doing away with the traditional ceiling of acoustic tiles.

Despite its shapely presence, the building boasts a simplicity that stems from a strict control of materials and its didactic structural system. The principal curved wall is of load bearing concrete block work with a veneer of glazed and common brickwork as the exterior leaf. Two hundred and sixty-millimetre thick concrete slabs span between the block work and strategic columns, which reduces the spans, resulting in no need for beams. This in turn allows the underside of the slab to serve as the ceiling, as it is a single plane. Painted white, it gives a textured alternative to plasterboard and uses less building material. Lights and basic servicing are cast into the slab; curtain tracks are suspended from it. The interiors follow different colour emphases on each level: red, purple and green dominate. The inside face of the main curved



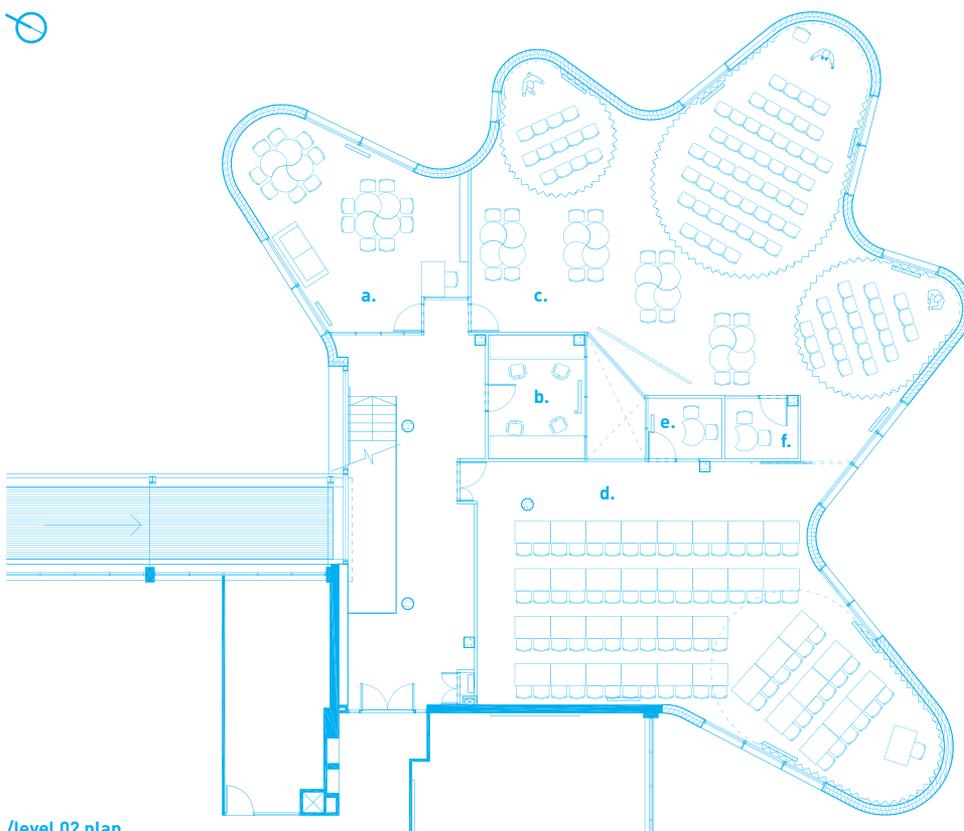


wall has its block work painted white, which allows light to bounce around this flexible 'cave'.

Ventilation and cooling is achieved through ceiling mounted fans, operable windows and a central lightwell and thermal chimney. No mechanical air-conditioning is provided and heating is through hydronic radiator panels mounted along the exterior wall. The spaces are carpeted except on the ground floor and this, along with the use of curtains, compensates acoustically for the absence of a traditional ceiling grid. The material selections are basic to meet the modest budget; internally, chain-link fencing has been used, a material more typically found on school perimeters.

Entry is made via both connections to the existing building and through a new ground floor entry on the north side, under a neat curved white canopy that continues the concave geometry. The ground floor works as an exhibition area as well as a direct lab-type teaching space, and the spaces here are connectable through the use of tilt-up glazed doors. Individual toilets are also contained on this level to reduce the need for servicing and plumbing and to keep the building simple as it goes up. The first and second floors have the same flexible plan, which is essentially three studio spaces divided by the central core; these can then be further divided by the curtains. The central core features the lightwell and a small staff area as well as two small traditional

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/level 02 plan

**/level 02 legend.**

- a. student resource centre
- b. staff
- c. learning studio c
- d. learning studio d
- e. couns. c
- f. couns. d

**/07**

Curtains provide a simple but effective solution to the need for flexible, group learning spaces.

rooms for student counselling. The building has a fully accessible roof deck that spans the whole area. This un-briefed space is both a result of the vertical stacking and the flat roof. It creates value for the school, adding a space that is remarkably pleasant, with scenic views over the leafy local streets and across to the city. It seems charged for events – in the way the rooftops of Melbourne have been ‘discovered’ for parties, cinemas and markets. This new rooftop could be used for anything from weddings to outdoor learning, in a manner similar to that of the original building at Mac. Robertson Girls’ High School (Seabrook and Fildes, 1934). The possibility now exists that the school could hire this facility out (in the way many schools do with their gymnasiums for example) to generate income.

This building, like Hayball’s recent project at Dandenong High School (AR113, page 68), predates the Federal Government’s Building the Education Revolution (BER) process and is the result of the Victorian State Government’s own education spending program. Indeed, both of these projects have featured in recent television advertisements for the State Government. Fitzroy High represents a sophisticated engagement with contemporary pedagogical practice. Its colourful façade has become a symbol of the benefits well-designed and innovative buildings from design-based practices can bring – rather than the expediency-led approach that has dominated the national BER process. **ar**

*Stuart Harrison is an architect and director of Harrison and White. He teaches at RMIT, hosts The Architects on Melbourne RRR and is Melbourne editor of AR.*

#### ARCHITECT

**architect** McBride Charles Ryan **project architect** Robert McBride  
**project team** Robert McBride, Debbie Ryan, Drew Williamson, Andrew Hayne, Michelle James, Angela Woda, David Fraser

#### BUILDER

ADCO Constructions

#### CONSULTANTS

**building surveyor** Reddo Structural **engineer** Hive Engineering  
**mechanical/electrical/hydraulic engineer** Connor Pincus and Saunders **landscape architect** Shah Turner

#### MATERIALS

**walls/cladding** Euroa glazed bricks; Austral Bricks unglazed bricks  
**roof** Concrete

#### PROJECT

**location** Fitzroy, Melbourne **client** Fitzroy High School Council  
**completed** 2009 **time to complete** 3 years **total floor area** 1300m<sup>2</sup>  
**paint** Dulux Weathershield **windows** Capral Aluminium **door hardware**  
Lockwood **heating/cooling systems** Zenitherm Passive+ **internal walls**  
Plasterboard, Blockwork **paint** Dulux Wash&Wear **flooring** Tuffmaster  
carpets; SIKA Epoxy **furniture** Sebel **fittings & fixtures** Enware, Caroma  
**curtains** Macquarie Textile

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