



PEB Exchange, Programme on Educational Building 2007/05

A New Creative Learning
Centre at a Girls School
in Australia

Amanda Bell

https://dx.doi.org/10.1787/184468117450





A New Creative Learning Centre at a Girls School in Australia



By Amanda Bell, Brisbane Girls Grammar School, Australia

Brisbane Girls Grammar School's new Creative Learning Centre was conceived to group arts studies which were previously scattered across the campus and to serve all students as a meeting place and technology hub. The building is specifically designed to provide the most flexible and innovative environment for teenaged girls, having special regard for the way girls learn and interact socially. The unique design also helps ensure protection from Brisbane's hot and humid environment.

THE CONCEPT

Understanding teenaged girls and caring for them as individuals is central to teachers facilitating the best academic and educational outcomes. Brisbane Girls Grammar is a secondary school with an enrolment of 1150 students aged between 13 and 17 years. The staff specialises in guiding the transition and development of young girls from commencement in Grade 8 through to Grade 12 when they enter the adult world as young women. What the teachers understand is that girls need to feel secure in their environment, they must be encouraged to feel confident about taking risks with their learning and, perhaps most importantly, they like to feel connected to each other.

While the school is on a restricted city site, the existing facilities provide well-resourced general classrooms, dedicated specialist spaces for disciplines such as science and health studies, and a leading library/cybrary; however the creative arts possessed no collective "home", with music, art and drama operating throughout the campus. Research tells of the importance of creative arts to the social and psychological development of teenagers – and especially to the positive and confident growth of adolescent girls –, so it was imperative that the next major development of the school's facilities address this shortfall and establish a centre dedicated to the creative arts.

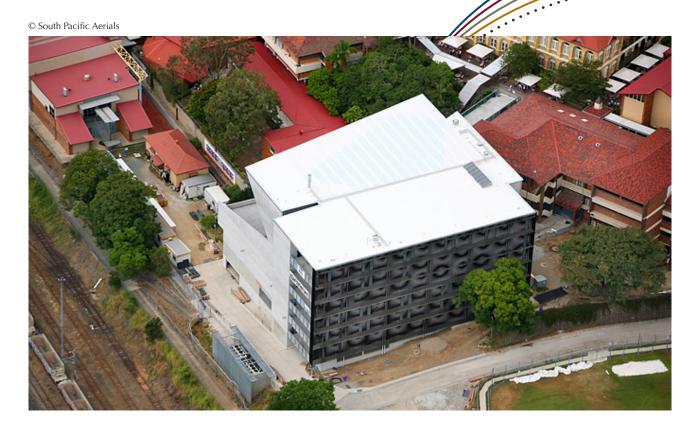
It was determined that this new facility should also become the social heart of the school – linking the old with the new and becoming a feature all students would use and enjoy, not just those studying music, art and drama. With this in mind it was decided that an entire floor at the core of the centre would be devoted to a new café, refectory, art gallery and outdoor terraces, positioned to overlook the middle of the campus and take full advantage of the views across to Victoria Park.

Alongside the notion of the centre becoming a place for all students was the recognition of technology's place as the all-pervasive partner in the learning process. A concept design team of specialist staff with expertise in new cross-disciplinary pedagogies and emerging technologies was established to conceive a creative technologies floor within the new centre. In this way, classes from every discipline could use the new learning environment, reinforcing the centre's relevance to all students.

THE DESIGN

The design brief involved a long but necessary process based on philosophical premises, facility requirements and considerable staff input. Firstly, the design needed to take full advantage of a difficult gradient, with limited campus connectivity and site access; secondly, it could not overshadow the distinctive and signature Main Building; thirdly, it needed to provide for the flexible and collaborative way girls learn; and finally, the design needed to reflect contemporary architectural practice and contribute positively to the cityscape of Brisbane.

The architects, m3architecture, were selected from a short-listed group of firms with reputations in designing education and/or arts facilities. m3architecture had refurbished the school's science laboratories and held an impressive portfolio of innovative designs in the university context. They were also one of Australia's representatives at the 2006 Venice Architecture Biennale. The lead architect for the Creative Learning Centre, Michael Banney, took the student-centred component of the school's brief as the platform on which to base his plan. The design emerged over time as discussions with trustees and staff inspired his understanding of what was required to effect optimal creative teaching and learning in the arts and technology for Grammar girls.



The school has a continuous 132-year history of educating young women and this is reflected in its landmark 1884 heritage Main Building in the heart of the city. In embarking upon a new development on the site as significant as the Creative Learning Centre, deference needed to be given to the existing architecture, without compromising the integrity of a 21st century educational complex.

An eight-storey AUD 25 million complex was designed for the campus's northwest footprint. The site required little excavation owing to the steep slope, which also prevented the roofline overshadowing the historic Main Building. In fact, this massive construction is invisible from the school's front entrance on Gregory Terrace. Some demolition of existing facilities was needed, including the pool built in the 1960s and the original art block; art was relocated to adequate demountable buildings housed on the school tennis courts for the duration of the Creative Learning Centre's construction. Once the demolition and excavation were completed, the lower two floors of the new centre were built to accommodate staff parking, air-conditioning plants and other equipment. Subsequent floors are totally dedicated to flexible learning spaces and social spaces.

The first two floors above the parking levels house instrumental and classroom music, featuring double volume rehearsal and performance rooms for the orchestras, bands and choirs; small group and individual practice suites; and large classrooms for academic music. While glass, timber and concrete are used throughout, excellent acoustics have been achieved through clever design modifications. Level three is the drama floor, with a studio, costume and set storage, and generous indoor-outdoor teaching and rehearsal spaces. The central floor on level four is the social floor, with coffee shop, gallery, terraces and staff retreat for the creative arts and technology teachers. Level five accommodates the distinctive creative technologies floor with innovative open plan arrangements, pod designs for group work and generous provision of interactive media. The top floor is for art classes where light, air and aspect are critical to the artistic and imaginative processes. Art areas are arranged in studio combinations with both indoor and outdoor access, including an art retreat for students in the conceptual phase of their art practice.

THE ARCHITECTURE

The Creative Learning Centre not only satisfies the complex design brief, but it provides 45% more teaching space and 65% more overall space, allowing the school to "breathe". It takes into account environmental considerations to ensure that shade and breezes are maximised throughout the building in a climate which is temperate in winter and hot and humid in summer. While the complex is air-conditioned, it also has ceiling fans and east-west cross ventilation to allow for energy efficient temperature control.

Banney's imaginative solution to the hot western wall was to create a double skin by cantilevering the floors to provide balconies and applying an anodised mesh screen to the external edge, thereby reducing the direct sun on the inner classroom wall, but allowing air to flow through for cooling. By clever combinations of inner paint patterning and outer meshwork the overall



praise from the public and the architectural profession for its innovative and cost-effective solution to what otherwise could have been an extremely large, blank and uncreative façade.

Materials of choice, both for their contemporary integrity and cost considerations, were concrete, metal and glass. While other buildings on the campus reflect their time and are predominantly brick and tile, the positioning of the Creative Learning Centre, at the rear of the school next to the railway line, bus way and inner city bypass, enabled a more industrial approach to be taken to the structure's fabric. The site access was limited to a single, narrow, steep roadway which prevented using time-efficient construction methods such as prefabrication of the K-shaped columns. Consequently, all formwork was constructed on site. Concrete pourings were considered special events characterised by cement truck convoys commencing at 4 a.m. to minimise peak hour congestion on the Terrace.





PEB Exchange 2007/5 - ISSN 1609-7548 - © OECD 2007

The project managers, Bovis Lend Lease, enjoy a long relationship with the school and, together with m3architecture, well understood the constraints of constructing such a large and complex building while the school was operational. The positive and successful co-operation between all parties was pivotal in ensuring the project remained on time, on budget and non-intrusive to the school's daily routine.

The Creative Learning Centre was handed over to the school in April 2007 – slightly ahead of time – after an intensive, but impressive 17 months of construction. The result is an inspiring, well-situated, open plan complex featuring an impressive, asymmetrical central void rising through its core allowing light, air and visual interaction between all six storeys. The walls of the teaching and learning spaces are floor to ceiling glass, and everywhere the sturdy concrete exoskeleton is deftly contrasted by the transparency of the internal matrix.

THE FUTURE

Brisbane Girls Grammar has developed a reputation for providing an excellent educational environment in which young women can enjoy optimal learning experiences. In the history of the school, the new Creative Learning Centre is its most adventurous development and one which demonstrably responds to the way the students navigate the all important adolescent years of learning. The facilities will help girls feel connected to each other and engage in the creative life of the school. The Centre will also respond to future changes in educational delivery through its design flexibility and aesthetic sensitivity.

For more information, contact: Amanda Bell Principal, Brisbane Girls Grammar School Brisbane, Australia Tel.: 61 7 3332 1307

E-mail: abell@bggs.qld.edu.au www.bggs.qld.edu.au





ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where the governments of 30 democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Commission of the European Communities takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

This work is published on the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

© OECD 2007