



A New Building for the Faculty Architecture, Building and Planning: A Building with a Pedagogical Purpose

The brief for the Faculty of Architecture, Building and Planning expressed a commitment to innovation for the design and delivery of an outstanding campus building. The aspiration was that the new building would demonstrate an outstanding level of quality in both the processes of design and development and in the finished product. In view of establishing a design intent that would provide a framework for decision making throughout the course of the project the brief also articulated a number of themes and placed trust in the design team to investigate these themes. Significant in the context of these themes was that the task at hand was the design and construction of a building intended for occupation by disciplines that will engage directly with the design and construction of buildings, thus providing a particular pedagogical focus. Such a discipline specific interest might also be applicable to a school of environmental science, engineering or trades.

Setting Project Culture

Our Client's brief was matched by a unique project culture that evolved at each stage. So many high level briefs for university buildings articulate an aspiration for a building that is 'iconic' or representative of 'world's best practice', or similar. In this instance this aspiration has very consciously been paralleled by the culture and processes established for the design and procurement of the new building. This allowed opportunities for each project team member to bring their best and, through their ability to collaborate and innovate, realise some significant outcomes. This was seen as a parallel to the interdisciplinary studio based pedagogy that characterises the Faculty of Architecture, Planning and Building.

It could be said that the project culture lead to three kinds of collaboration – collaboration with the Client, collaboration across the project team, and collaboration on site.

Collaboration with the Client

The new building was conceived as a vehicle for research. A number of Faculty research projects have been integrated into the processes of design and procurement, as well as into the fabric of the building itself. The Faculty also expressed a preference for the building to be fundamentally sustainable though not necessarily within the constraints of a particular tool. The project is nonetheless targeting a 6 Green Star rating.

Another significant form of collaboration has been constant engagement with students and alumni, be it through presentations and lectures, site inspections, or in the design studio. In addition Property & Campus Services explored new ways to engage with students and academics, offering opportunities for students to learn from the university's capital works program.

Collaboration across the Project Team

Two Architectural practices – Melbourne based John Wardle Architects and Boston based NADAAA came together in an equal design partnership at the competition stage. This partnership has had the effect of foregrounding the design conversation, and has allowed JWA/NADAAA to articulate their response to the design themes. Their focus on the pedagogical purpose of this building has emphasised the exploration of construction systems and the means and methods of fabrication. Collaboration more broadly across the Project Team has allowed a very particular design response to be realised. Box beams constructed from laminated veneer lumber span a twenty meter wide Design Hall. The screened facade system is didactic in the way in which it moderates climate and views. An historic facade has been integrated into the design proposal as a lesson in neoclassical architecture. Engineering services systems have been designed simply and pragmatically, relying on the user to control their environment.

Collaboration on Site

Increasingly, the means and methods of construction are being transformed. Traditional approaches are no longer assumed should there be gains to be had through employing prefabrication or digital fabrication. Working with complete design documentation Brookfield Multiplex identified some opportunities for efficiency that were then realised through collaboration and within the context of the design intent. Initially expecting to complete the glazed roof over the Design Hall from a birdcage scaffold beneath, they devised an approach that enabled the timber box beams and large sections of glazing to be fabricated off site and craned into position in a fraction of the time. Similarly, through working directly with the fabricator the team was able to produce digital files that translated the design intent for perforated zinc screens into patterns for the machines that punched, folded and cut the material in the factory. This resulted in a significant saving in production time whilst also achieving a high degree of variation, tight construction tolerances and meeting budget constraints. The obvious benefit of employing strategies like this has been realising a building that is expressive of its pedagogical purpose, and has been delivered on budget and four months before time.