

Caulfield Grammar School

The Learning Project



Project Details

Project Name: The Learning Project

Location: Caulfield Grammar School, Melbourne, Victoria, Australia

District Name: Caulfield, Malvern, Wheelers Hill campuses

Principal: Rev. Andrew Syme

Occupancy Date: October 2014

Grades Housed: From Preparatory to Year 12

Capacity (Students): 93

Gross Area: 410sq.m / 4413 sq. ft.

Per Occupant (gross): 4.4sq.m / 47 sq. ft.

Design and Build? No

Site Development: N/A

Building Construction: \$1,200,000 AUD (typical price/site)

Fixed Equipment: \$60,000 AUD Furniture & Equipment (typical price/site)

Submitting Applicant | Firm

Name: Hayball

Project Role: Architect

Contact: Kirsten Trengove

Title: Practice Communications

Address: 4/135 Sturt Street, Southbank, Victoria 3006, Australia

Email: ktrengove@hayball.com.au

Phone: +61 3 9699 3644

Sub-Consultants

Name: Precom

Project Role: Lead Contractor / Fabricator

Name: BRT Consultants

Project Role: Electrical

Name: Acoustic Logic

Project Role: Acoustics

Name: ModCons

Project Role: Mechanical Design & Construct

Name: DiB

Project Role: Specialist IT & AV Consultant & Supplier

[Click here](#) to view a video of the full story of the construction and delivery of the Learning Project.



Executive Summary

The Learning Project evolved through the masterplanning of the three metropolitan campuses at Caulfield Grammar School. Early in the process it became evident that a new education pedagogy, strongly grounded in research and developed through professional learning, was emerging at the school. Questions were asked about what learning would look like at CGS in the next five, ten or even fifty years, and how the spaces would evolve beyond the existing classrooms and collaborative zones to support this.

The project consists of a series of similar installations deployed across 3 campuses to test a wide variety of spatial arrangements, designed to catalyze innovation in teaching and learning practice. This project is unique in its scale, scope and reach - it does more than deliver a beautiful learning environment, it seeks to get at the very heart of good design for learning from both an instructional and architectural perspective.

In analysing the existing conditions across all campuses it was revealed that the school's learning spaces were actually playing a significant role in the prevention of the kind of pedagogical shift that was needed. The range of spaces catered to a single mode of use, offering little to no variety in size, spatial experience or variation on the learning activities catered for. Not wanting to replace one single mode of use with another, the Learning Project brief was to develop a highly connected environment that would support multi-modal student learning, whilst avoiding large barn like or open plan spaces.

The Learning Project is a bold initiative that demonstrates the interplay between action that is knowledgeable and knowledge that is actionable.

As a result, the Learning Project explores the nature of purposeful settings over highly flexible ones, where users of the space will intuitively understand the activities the settings are designed to support. By limiting the flexibility of some spaces, the quality of experience for the user is increased as the lighting, acoustics, furniture and resources available are appropriate to the learning activity being undertaken.

An authentic prototype, the Learning Project is a vehicle for change, enabling the school and design team to evolve spaces and settings to support a multi-modal, learner centered pedagogy. By conducting research and post occupancy evaluations to critically assess and analyse the successes and failures of all aspects of the project, both the school and design team are able to develop an in depth understanding of the links between pedagogy and space at CGS. Now in its 3rd year of occupation, the Learning Project is already influencing both the way new building projects and teaching practice are approached at the school.

Recognising the value in deepening and disseminating our understanding of how spaces can support learning, both Hayball and Caulfield Grammar School are now linkage partners with the Learning Environments Applied Research Network (LEaRN), at the University of Melbourne. As part of the Evaluating 21st Century Learning Environments (E21LE) ARC Linkage Project, the LEaRN research team is developing new learning environment evaluation tools which are being used to evaluate the impact that the new environments are having on a variety of factors including student engagement and results.

“this is the best building I’ve ever had for my learning” - Year 6 student

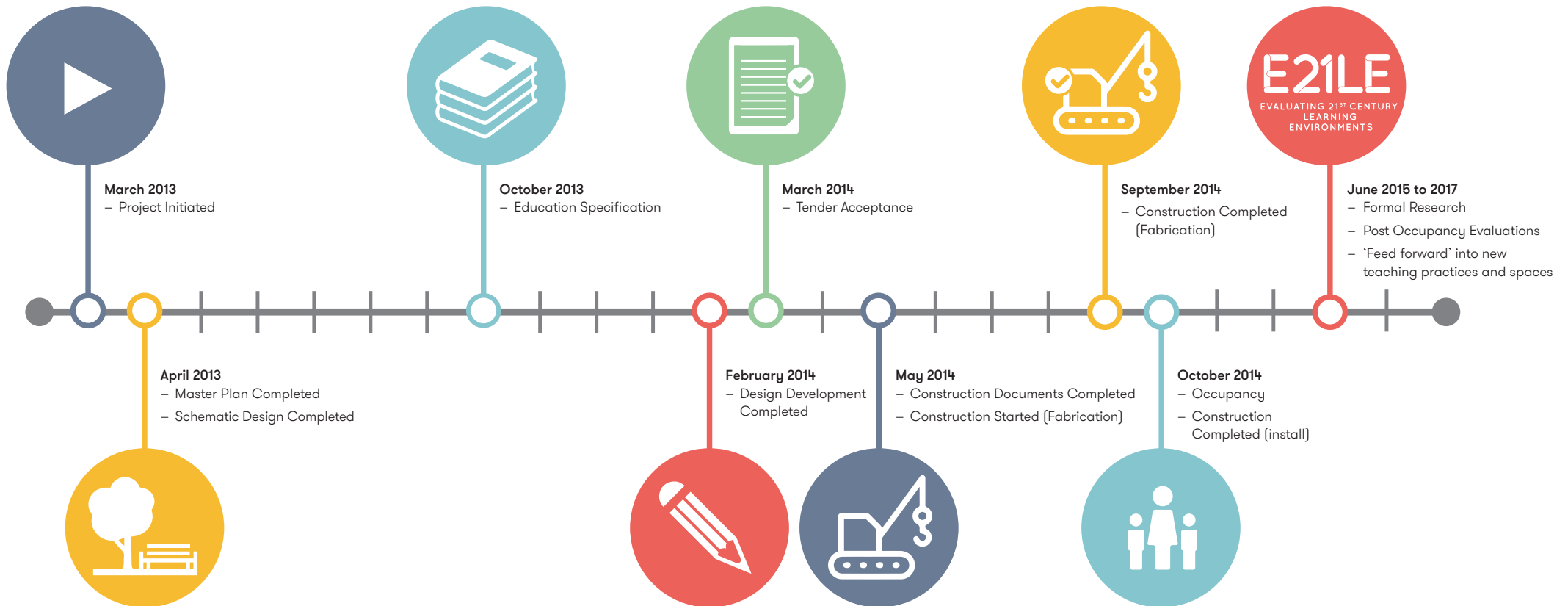
The shared commitment to develop new understandings, document all stages of the project and learn together through testing and evaluating ideas has further strengthened the working relationship between the school and design team. The buildings themselves have become the tool by which we are learning together as architects and educators, to develop a common language and ensure future projects at Caulfield Grammar School will provide the highest quality learning experience for the students.

The Learning Project is a bold initiative that demonstrates the interplay between action that is knowledgeable and knowledge that is actionable. This collaboration between educators, architects and researchers is an important first step in setting new standards for the design of truly innovative learning environments.

By engaging with formal research to evaluate its impact and creatively utilizing pre-built portable construction, the Caulfield Grammar Learning Project makes a significant contribution to the development of theoretically informed, practice oriented, architectural design for learning. The impact of the project has been resounding for both staff practices and student responses.

Scope of Work and Budget

The Learning Project was delivered across three separate campuses of the Caulfield Grammar School. Each campus presented different student cohorts (Whealers Hill being K-12, Malvern being K-6, and Caulfield being 7-12) yet the primary objective of the exercise remained the same: to provide a series of similar installations deployed across 3 campuses to test a wide variety of spatial arrangements, and designed to catalyze innovation in teaching and learning practice.



Project Details Malvern Campus



Educational Facility Address: Willoughby Avenue

City and Postcode: Glen Iris, 3146

State: Victoria, Australia

Educational Facility Phone: (03) 9885 5995

Principal: Rev. Andrew Syme

Head of Campus: Jill Bosanquet

Type of Educational Facility: Pre-Primary & Primary

Year Levels: From 3 Year Old Kindergarten to Year 6

Occupancy Date: November 2014

Capacity: 430 Students (Current Enrolment)

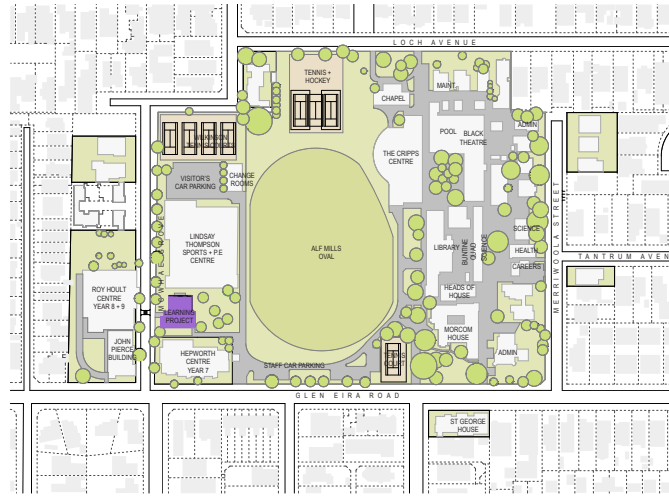
Site Size: 3.7 Acres

Gross Area: 2583 sq ft

Project Budget

Total Project Cost: \$585,000 AUD

Project Details Caulfield Campus



Educational Facility Address: 217 Glen Eira Road

City and Postcode: East St Kilda, 3183

State: Victoria, Australia

Educational Facility Phone: (03) 9524 6300

Principal: Rev. Andrew Syme

Deputy Principal / Head of Campus: Jim Alexiades

Type of Educational Facility: Secondary

Year Levels: From Year 7 - 12

Occupancy Date: October 2014

Capacity: 1350 (Current Enrolment)

Site Size: 18.2 Acres

Gross Area: 4413 sq ft

Project Budget

Total Project Cost: \$1,200,000 AUD

Project Details Wheelers Hill Campus



Educational Facility Address: 74 - 82 Jells Road

City and Postcode: Wheelers Hill, 3150

State: Victoria, Australia

Educational Facility Phone: (03) 8562 5300

Principal: Rev. Andrew Syme

Deputy Principal / Head of Campus: Paul Runting

Type of Educational Facility: Pre-Primary, Primary & Secondary

Year Levels: From Pre-Preparatory to Year 12

Occupancy Date: October 2014

Capacity: 1445 Students (Current Enrolment)

Site Size: 51.6 Acres

Gross Area: 4413 sq ft

Project Budget

Total Project Cost: \$1,200,000 AUD



Staff workshop for The Learning Project



The Learning Project: typical learning spaces

1. School and Community Engagement

A clear objective of The Learning Project was to challenge the nature of existing learning spaces at Caulfield Grammar School (CGS) and thus enable the next step in the evolution of teaching and learning practice across the schools three metropolitan campuses.

For the design response to fulfil this objective, a strong engagement and connection between the school community and the design team was critical. The school appointed ambassadors from each campus to join the design team in re-imagining learning spaces. This consisted of 24 key teaching staff, (8 from each campus) and the school leadership team of Principal, Head of Teaching and Learning, and three Heads of Campus.

The design process involved regular workshops and discussions with the project ambassadors who were then the conduit to the rest of the school community, collating feedback and ideas from within their own campuses. This process established a common language and shared vision for how learning spaces would support an evolving pedagogy at CGS.

With each campus being unique in size and cohort makeup, a key challenge during the briefing process was harnessing all stakeholders input to develop cohesive pedagogical objectives and a common direction for all campus. Delivery of three built projects, in separate locations with differing school needs, required strategic planning and consideration of alternative methods of construction. i.e. prefabrication.

The Learning Project fosters joint use/ whole school community engagement by designing the spaces as inter-disciplinary studios, owned by all and providing engaging learning settings for students from ages 5- 18 years.

The Learning Project took advantage of the assets available within the community by engaging staff in site visits to exemplary school projects and by involving the project in a formal education research program. This was valuable in giving stakeholders and the design team a mandate to explore the possibilities of contemporary teaching and learning environments.

2. Education Environment

The Learning Project grew out of the School's vision for a new pedagogy, strongly grounded in research and developed through professional learning. Supporting a "learning anywhere, anytime" philosophy, the school's aim was to support students in their learning as individuals within a community of learners.

The design response to such a challenging and exciting brief has seen the creation of a series of highly purposeful and connected learning settings, each designed to support a particular learning activity. The adjacencies, size and connectedness of these settings was devised to ensure the project maximized opportunities for a multi-modal, learner-centred pedagogy to be supported.

Designed as four distinct zones: Launch Pad, Collaborative Studio, Workshop and Hub, learning activities have been grouped together to provide working spaces for up to 93 students and 6 staff. Up to a total of 33 unique learning settings have been designed, each created with bespoke resources, furniture and technology supporting a particular learning activity.

As the project intended to provide a place to evolve, test and evaluate ideas, this diversity was a strong design driver. By deliberately providing subtle variations across all setting typologies the design not only supports a range of learning activities, but also provides multiple opportunities for learners to choose the setting that best supports their own needs.

The Learning Project explores purposeful spaces over flexible ones, where the quality of the user experience is increased as the lighting, acoustics, furniture and resources available are appropriate to support the learning activity being undertaken.

The Learning Project is adaptable in supporting future changes in educational delivery systems by being an evolving prototype, actively defining the future of teaching and learning spaces and practice at CGS. It provides a platform for staff and students to test and evaluate changes in curriculum, pedagogy and space, which can then be implemented across the wider school community.

3. Physical Environment

The Learning Project provides an enhanced user experience through providing a physical environment, which seamlessly interconnects a network of spaces and promotes the “flow of learning”. The strong connection between indoor and outdoor learning settings, and a considered roof design which provides natural light into the depths of the building, contribute to providing an appealing and contemporary environment for learning.

The Learning Project was designed to fit within the larger community context, by providing a solution which utilised a ‘kit of parts’ approach to provide consistency of learning objectives across each campus, whilst recognising the differences in student cohorts from ages 5 -18, at each campus.

As a prototype facility, the Learning Project was designed and developed as a series of relocatable buildings that could be moved between the school’s three metropolitan campuses. Working with modular construction company Precom, the buildings were fabricated off site and designed with the parameters of transportation in mind. This process maximised the efficiency of construction time, whilst minimising disruption to the school during on site installation.

Considering the significant environmental differences of each of the three sites and the potential relocation across sites a factor, it was critical that the design of the buildings be able to work across these conditions. This has been achieved through careful selection of materials and detailing.

The buildings are sited on each campus to connect into existing circulation paths and provide access to other core curriculum buildings. They have been positioned and oriented to make the most of unique views to and from their surroundings. As a “whole of school” facility, the Learning Project provides a focus for innovative teaching and learning at each campus.

In its prototypical nature, the project motivates the research and evaluation of settings created, providing valuable insight into learner needs at CGS.

4. Results of the Process and Project

The Learning Project achieves the school’s education goals by providing a multi-modal learning environment that promotes transition to contemporary teaching and learning pedagogies.

The conception of this project as a prototype allowed it to achieve both school district and community goals by exciting staff and students to embrace and explore different ways of collaborative teaching and learning. A robust method of construction, with benefits of fast-delivery, modularity, and portability has meant that the school was able to deliver three significant projects, in short time and with little disruption to daily campus activities .

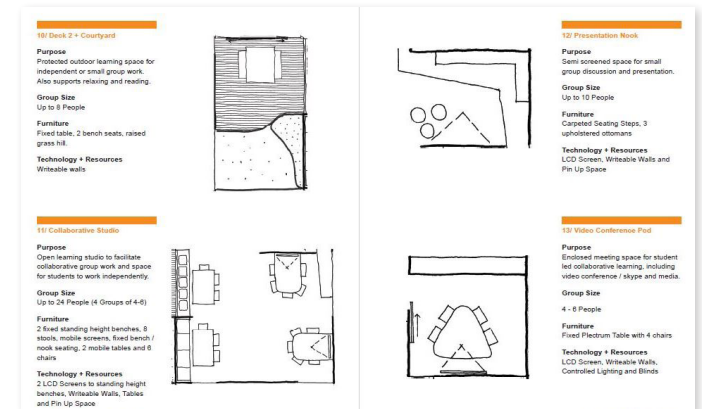
To further assist with the capture and communication of the ideas explored throughout the Learning Project a Design Guide has been developed. Outlining each of the learning settings in detail, the guide provides the school community and visitors with a record of the process, ideas and outcomes. By capturing the intent of settings we are able to evaluate the extent of success of the spaces, and provide interventions where improvements can be made. This ongoing post occupancy evaluation assists in capturing the changing practices of teaching and learning at the school, and informs how future facilities can be designed to reflect the school’s education goals.

In conjunction with Caulfield Grammar School, we are linkage partners with the Learning Environments Applied Research Network (LEaRN), at the University of Melbourne. As part of the Evaluating 21st Century Learning Environments (E21LE) ARC Linkage Project, the LEaRN research team is developing new learning environment evaluation tools which are being used to evaluate the impact that the new environments are having on a variety of factors including student engagement and results.

This shared commitment to develop new understandings and learn together through testing and evaluating ideas has further strengthened the working relationship between the school and design team. The planning process and the buildings themselves have become the tools by which we are learning together as architects and educators, to develop a common language and ensure future projects at Caulfield Grammar School will provide the highest quality learning experience for the students.



The Learning Project: designed not to look like a relocatable building



The Learning Project: ‘Drivers Manual’

To assist staff the ‘Drivers Manual’ was developed to articulate the design intent of each space and its specific teaching and learning functionalities.

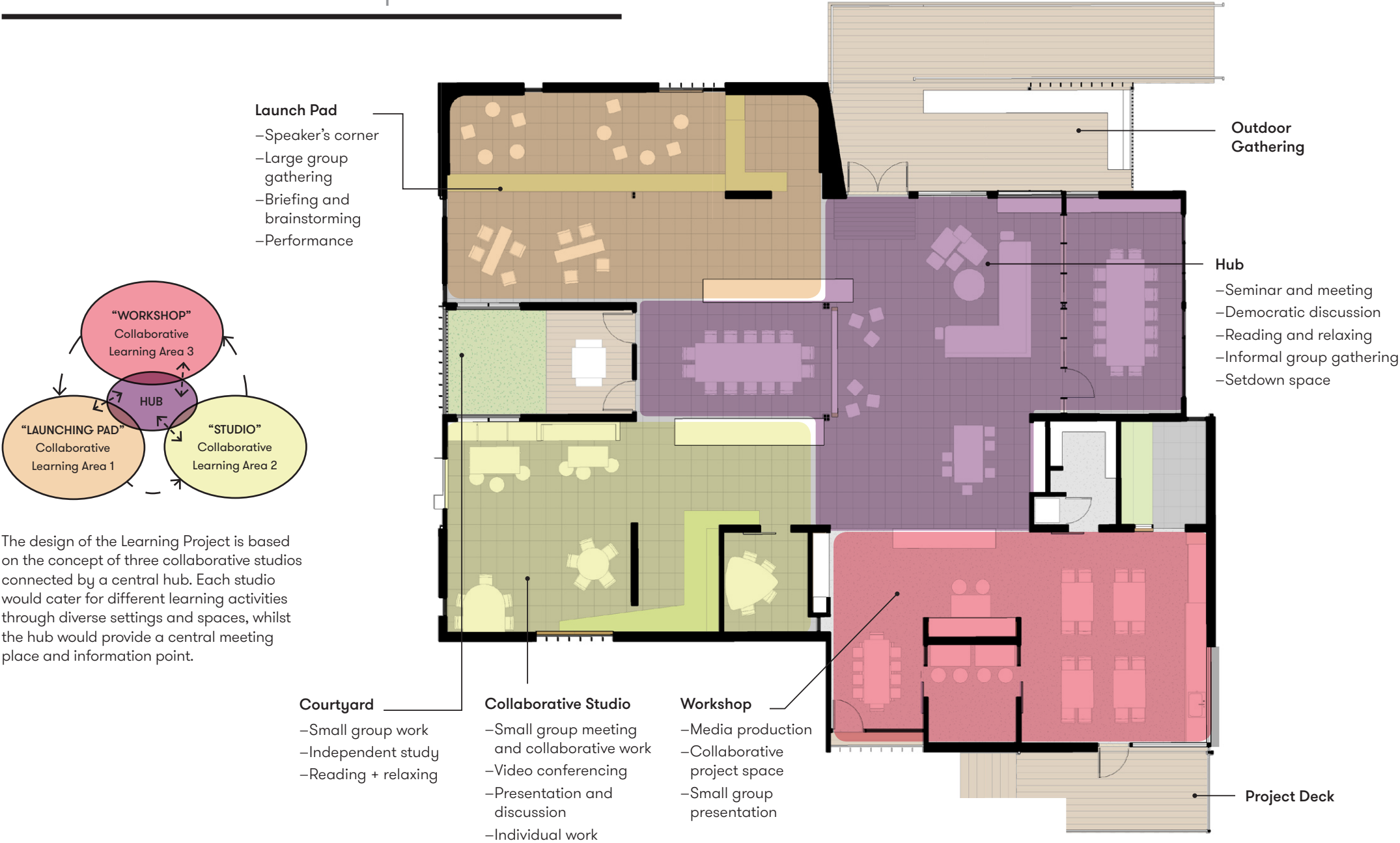
Floor Plan Settings

Caulfield and Wheelers Hill Campus - Senior Schools



Floor Plan - Zoning

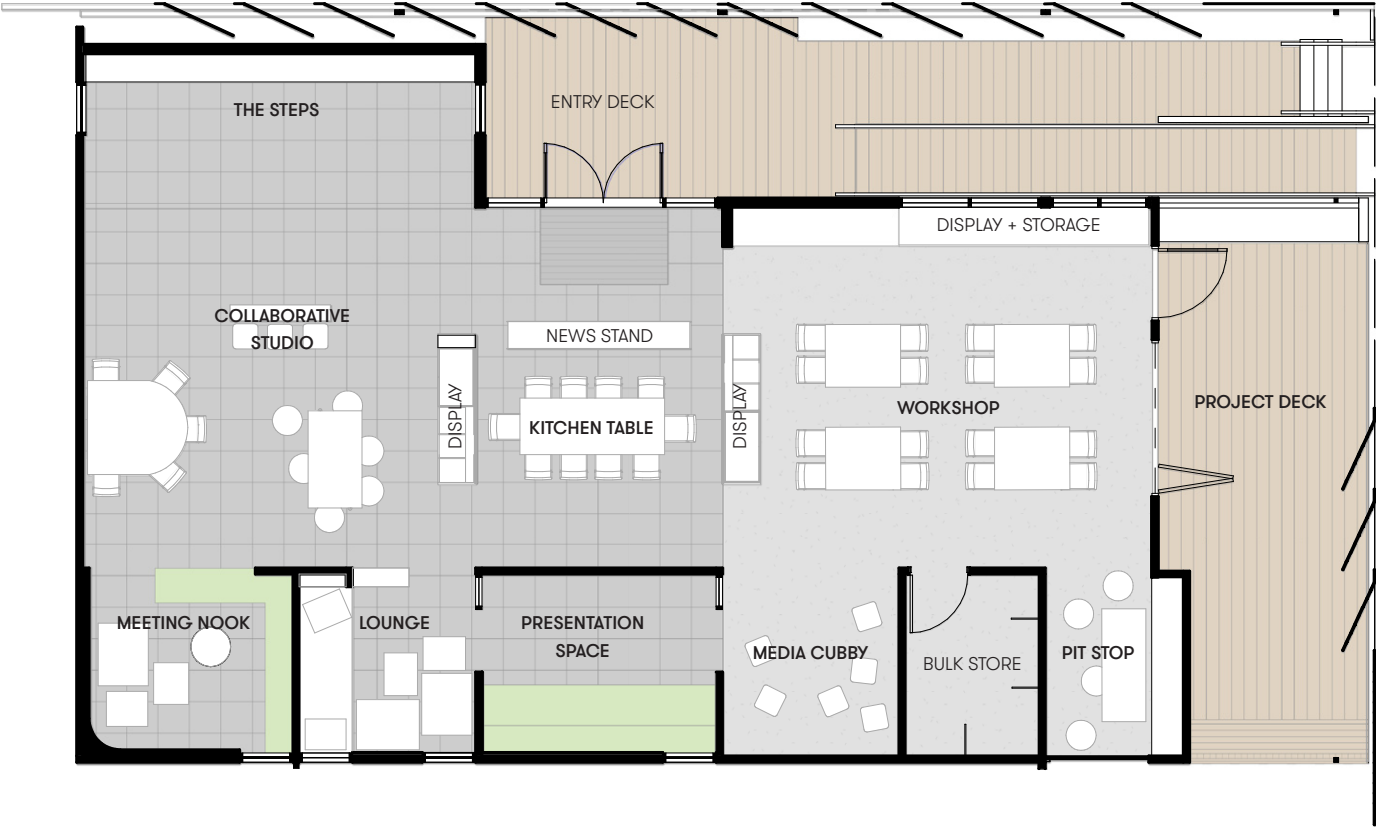
Caulfield and Wheelers Hill Campus - Senior Schools



The design of the Learning Project is based on the concept of three collaborative studios connected by a central hub. Each studio would cater for different learning activities through diverse settings and spaces, whilst the hub would provide a central meeting place and information point.

Floor Plan Settings

Malvern Campus - Junior School



Floor Plan - Zoning

Malvern Campus - Junior School



The Learning Project

Educational Settings - 'Pit Stop'



Student storage and display

Workshop

Creative project space for up to 16 students engaging in creative activities, making and doing

Pitstop

Small group setting with writeable table top to assist in collaborative planning for projects



The Learning Project

Educational Settings - 'Staff Setdown'

Workshop

Creative project space for 16 students

Print station

Resource storage and print station for staff and student use



Greenhouse

Meeting space for formal meetings, seminars and targeted teaching

Lounge

Informal gathering, instruction, presentation and discussion. Also supports independent study, reading and relaxing

Secure storage

Staff storage for student files and personal belongings

Kitchen bench

Set down space for staff enabling staff to staff and staff to student discussion

The Learning Project

Educational Settings - 'Interconnected Settings'



Media cubby

Enclosed space for media production and recording using ipads and other mobile devices

Resource storage

Equipment and resources for creative workshop space

Workshop

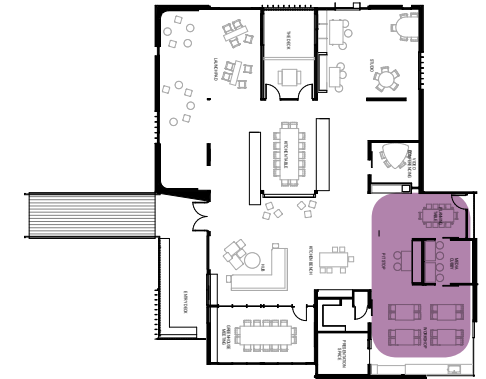
Creative project space for 16 students

Pitstop

Small group setting with writeable table top to assist in collaborative planning for projects

Planning, production and editing

Standing height work bench and pinboards to support storyboarding and collaborative planning of visual and digital presentations



The Learning Project

Educational Settings - 'The Lounge'

Workshop

Creative project space for 16 students

Greenhouse meeting space

Meeting space for formal meetings, seminars and targeted teaching



Lounge

Informal gathering space for direct instruction, presentation and discussion. Also supports independent study, reading and relaxing

Kitchen bench

Set down bench for staff enabling staff to staff and staff to student discussion

The Learning Project

Educational Settings - 'Workshop'



Display cabinet

Exhibition of student work

Media cubby

Enclosed space for media production and recording using ipads and other mobile devices

Workshop ceiling

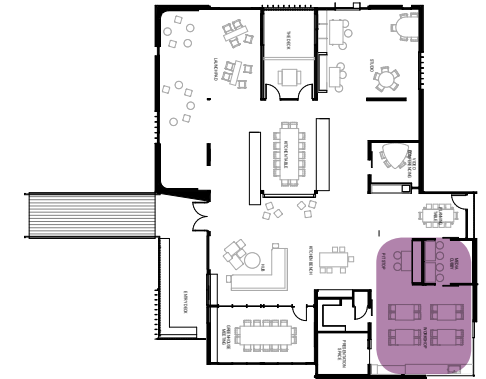
Acoustic baffles and drop down power outlets to provide flexibility for multiple uses and additional acoustic treatment for noisy activities

Workshop

Adjustable height tables and stools to enable a range of working styles. Creative wet studio for collaborative projects and group work using a range of media

Resource and student storage

Pitstop
Small group collaborative planning



The Learning Project

Educational Settings - 'Courtyard'

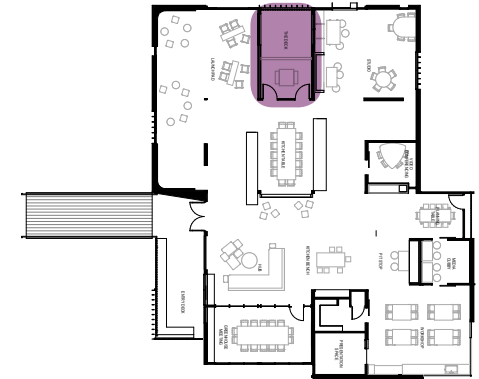
Chalkboard surface

Courtyard

Protected outdoor learning space for independent and small work

Translucent Roof Sheeting

To maximise natural light into the courtyard



Visual connection to both launch pad and collaborative studio adjacent

Grass Hill

Provides relaxed environment for a small number of students working independently, studying, reading and relaxing

Outdoor table and benches

For small group meetings and individual work

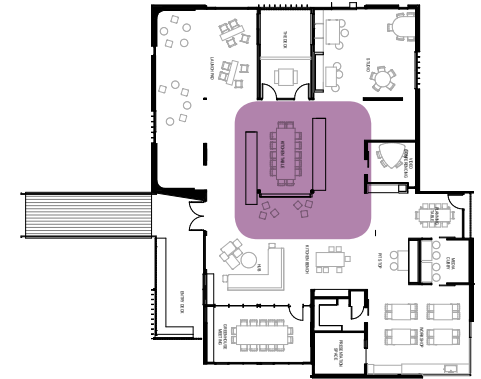
The Learning Project

Educational Settings - 'The Kitchen Table'

Visual connection to lounge and central hub spaces

Pinboard

For the display of student work and learning resources



Meeting nook

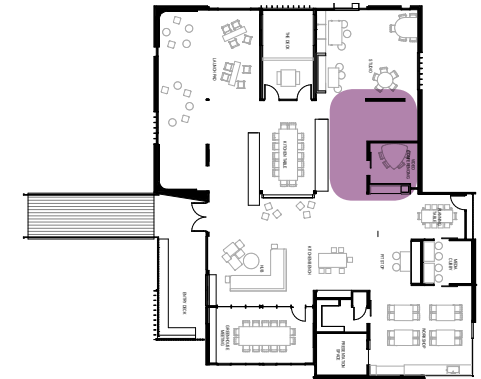
Launch pad area beyond

Kitchen table

Central, protected meeting space for democratic discussion, direct instruction and collaborative group work

The Learning Project

Educational Settings - 'Presentation Nook'



Video conference pod

Kitchen bench
Set down space for staff and students

Presentation nook
Semi screened space for small group discussion and presentation.
Also supports independent study

The Learning Project

Educational Settings - 'Collaborative Studio'

Interactive surface table

Collaborative studio

Open learning studio to facilitate independent and interdependent group work. Diverse range of settings and technology available



Writeable walls



Presentation nook

Large screen and Apple TV to facilitate seamless connection with student devices for information sharing

The Learning Project

Educational Settings - 'The Launching Pad'



Pinboard

For the display of student work and learning resources

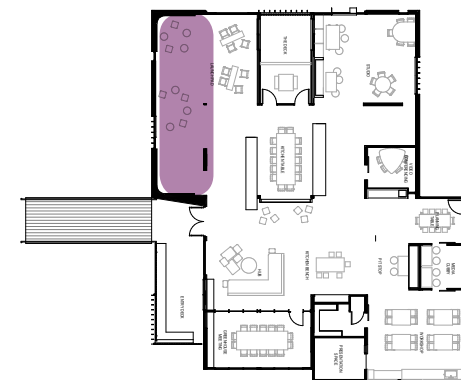
Working walls

Writeable surfaces for brainstorming, storyboarding and discussion of ideas

The steps

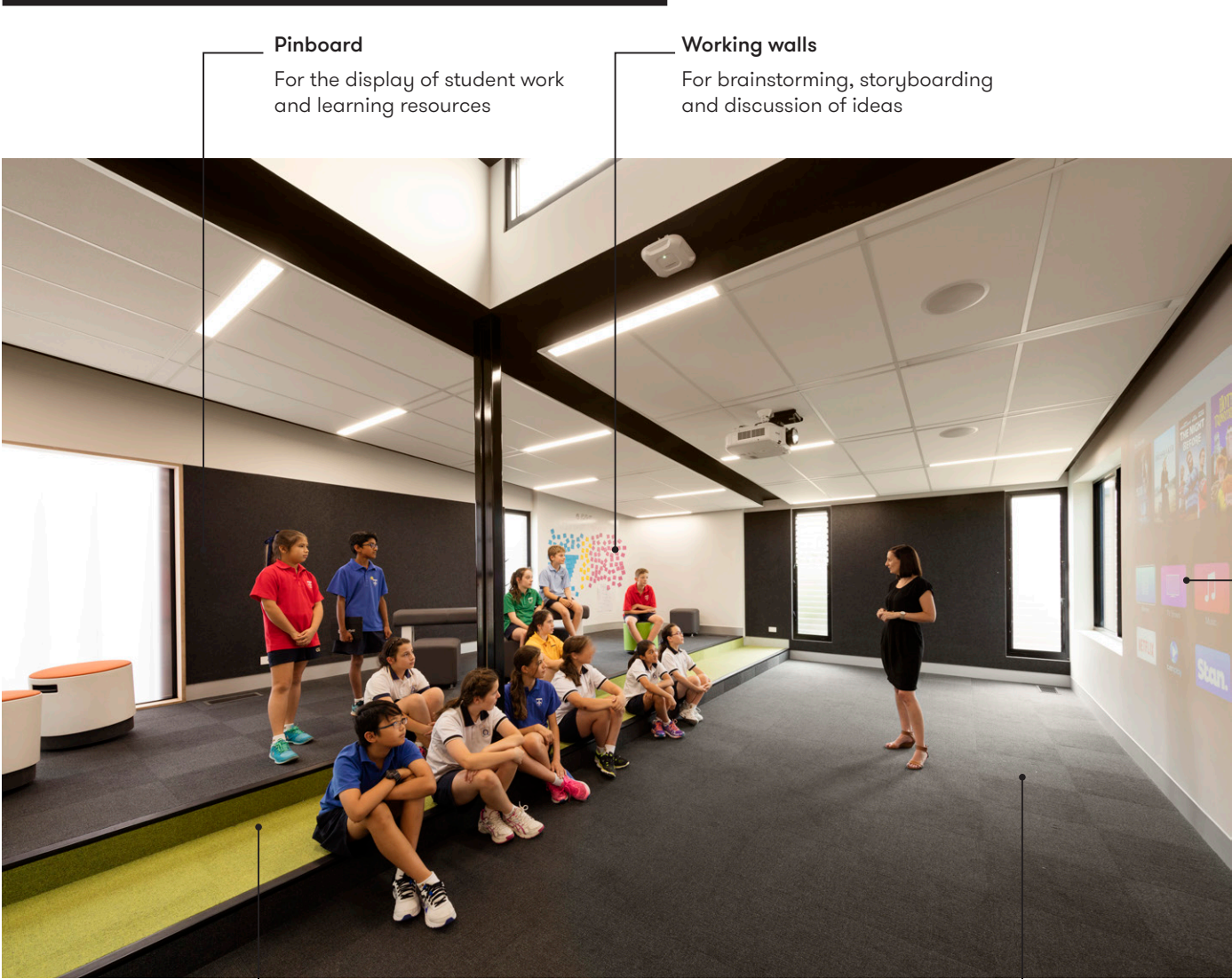
Raised platform and steps for whole group gathering, instruction and presentation. Also supports performance reading and relaxing

Highly mobile furniture allowing agile adaptation of space



The Learning Project

Educational Settings - 'The Launching Pad'



Pinboard

For the display of student work and learning resources

Working walls

For brainstorming, storyboarding and discussion of ideas



Working wall

For the interactive projection of student and staff media facilitating presentation and discussion

The steps

Raised platform and steps for whole group gathering, instruction and presentation. Also supports performance reading and relaxing

Large flat floor area

Providing flexibility to adapt for different learning activities





“An exceptional point of significance has been Hayball’s willingness to engage our teaching staff in the creation of these spaces. From the outset the process was a true collaborative one.”

- Reverend Andrew P Syme, Principal of the School

Delivering the pre-fabricated modules from factory to site



School Narrative

Over its 133 year history, Caulfield Grammar School has continually evolved to meet the changing needs of metropolitan Melbourne, including the early expansion to a multi-campus model of operation. Guiding the delivery of learning programs into the future is the school's mission "to enable quality learning every day in every experience for every learner for life".

As the school transitions towards more contemporary teaching and learning practices, our requirement was to construct new learning spaces to enable staff to choose the environment that best suits the learning needs of their particular lesson or moment within a lesson.

Not wanting to impose one mode of learning, the creation of "multi-model learning environments" was the focus. The dedicated programming of each space such that it is purposefully maximises the use of all indoor space was the overriding intention. Applying contemporary concepts such as the creation of three walled classrooms to enhance connections between learning areas also contributes to ensuring the visibility of learning at all times as does the introduction of glazed walls for transparency from within and beyond the classrooms. Perspex/glass writing walls, wireless connectivity and multiple focal points were other fundamentals delivered in the construction.

There are 33 exceptional features throughout the Learning Project, all pivotal to providing an engaging learning experience for students spanning the ages of 5-18 years. Lounges, a greenhouse, video conference pods, a media cubby, working walls, a kitchen table and a news stand are tangible examples of unique constructions that are not found in traditional classroom settings. Each of the 33 exceptional features has a clear purpose enabling teaching staff to have significant choice in how they deliver their lesson.

Another critical point is the careful consideration of the needs of the 'adult learner' – our teaching staff. Professional educators all have differing styles of working effectively and the adult spaces throughout the Learning Project will cater for introverts and extroverts alike in students and staff.

Catering for diverse age ranges and imbuing a whole-of-school vision across discrete campuses were key challenges which were met by the comprehensive engagement of key stakeholders and decisions based on evidence and research.

An exceptional point of significance has been Hayball's willingness to engage our teaching staff in the creation of these spaces. From the outset the process was a true collaborative one. Twenty-five education staff were invited to provide insight in to the realities of their classroom teaching and Hayball's team complemented this with sharing their expertise and experience from previous, similar projects.

There has been a great sense of optimism among the school community as the spaces came to fruition, with a significant demand from excited staff to occupy the new spaces which underscore our emphasis on student learning at the heart of the school. With installation having just been completed, we are preparing to move into the new facilities as Term 4 gets underway.

From the Principal

CAULFIELD GRAMMAR SCHOOL, THE LEARNING PROJECT

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Reverend Andrew P Syme
Principal

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