



EXECUTIVE SUMMARY

The new Mernda Central P-12 College was designed as part of the Victorian Government's New Schools Public Private Partnership Project which delivered 15 new schools over 3 years within a number of Victoria's fastest growing metropolitan and regional communities. Designed and delivered by the Learning Communities Victoria (LCV) consortium, the new schools provide vibrant and dynamic places for teaching and learning. They are each nestled within the heart of their communities and represent a new direction in school design.

Located on a greenfield site, adjacent to an existing community centre, Mernda Central P-12 College has been designed to support the development of a vibrant school environment and to be a key part of the local community. At the heart of the campus, a Central Plaza provides students with a place for learning, playing, sport and social interactions, whilst also facilitating community use outside of school hours.

Mernda Central P-12 College has been conceived as a place that students will want to attend, both during school and after school; an educational hub for children of all ages. The whole school is a learning and teaching laboratory designed to support the social, physical and intellectual development of every student.

The campus features four Junior and four Senior Learning Communities incorporating an agile learning model; a shared Specialist Learning Building comprising science, materials technology, design, arts and media spaces; an Administration & Resources Building with integrated staff hub, consultation rooms, zoned resources and adaptable spaces; and a Community Zone incorporating double Games Hall, Music and Performing Arts Facilities, Food Technology, and Community Hub in close proximity to a Learn to Swim School. The design of the indoor and outdoor environments and how they relate provides opportunities for students to engage with the campus as a whole and to choose the types of spaces that best suit their activities and interests.

Mernda Central P-12 College has been designed as a place for everyone regardless of their age, gender, cultural background or ability. The design recognises the differing learning orientations and needs of learners, providing agile environments that allow students to flourish through learning in a way that best suits their needs.

SCOPE OF WORK AND BUDGET

The project scope included the development of a new Prep to Year 12 College on a 10.48ha greenfield site. The school campus was required to accommodate Long Term Enrolment numbers of 475 Primary students and 1,100 Secondary students, and to provide integrated community facilities.

The budget for this project is undisclosed.





LEGEND

Project Scope Area

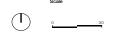
Project Built Form

←→ Pedestrian Access Point

←→ Vehicular Access Point

- A Main Entry
- B Civic Forecourt
- C Central Plaza
- D Administration
- E Resource Hub
- F Primary Learning Community
- G Science
- H Design / Art
- I Technology
- J Senior Learning Community
- K 2 Court Stadium
- L Community Hub
- M Canteen
- N Food Technology
- O Performing Arts
- P Learn to Swim
- Q Playing Field
- R Scarred Tree
- S Productive Garden
- T Bike Enclosure
- U Carpark
- V Passive Open Space
- W Jindi Family Community Centre

Mernda Central P-12 College Site Plan





SCHOOL & COMMUNITY ENGAGEMENT

Describe the Community

Mernda Central P-12 College was developed as part of the New Schools PPP Project, to provide a vibrant heart to the rapidly growing Mernda community.

The new school was developed in a residential area where the surrounding development (existing and proposed) is a mix of low and medium density residential dwellings, public open space and community infrastructure. The school site is located within a community activity precinct incorporating the Jindi Family and Community Centre, passive open space to the south and future neighbourhood activity centre to the north east.

Describe the process

The Learning Communities Victoria (LCV) consortium were involved in an extensive and collaborative process to design, build and manage Mernda Central P-12 College, which commenced with an interactive bid phase where the consortium created a design proposal that responded to a functional brief and site specific context. These initial design proposals were developed in collaboration between the architects, landscape architects, builders, facilities managers, community partners, providers and the consortium's educational consultant Dr Ben Cleveland, and were tested in an interactive workshop process as part of the competitive bid model of a Victorian Government Public Private Partnership (PPP). This interactive workshop process was undertaken in conjunction with the Department of Education and Training (DET), the Office of the Victorian Government Architect (OVGA), specialist consultants, reference principals and education consultant Dr Julia Aitkin. This design process continued to evolve over

a thirteen week bid process to continually test and challenge the design for Mernda Central P-12 College, culminating in the preparation of a design proposal that was submitted as part of the New Schools PPP.

Upon appointment as the successful bidder for the New Schools PPP Project, LCV consortium worked in partnership with DET to continue to develop the design of Mernda Central P-12 College. An extensive Post-Bid Design Development phase was undertaken to revise and refine the design in close collaboration with DET, OVGA, community partners, Educational Consultants and the LCV consortium, testing and challenging every aspect of the design prior to construction commencement. This process continued further into construction where the design continued to evolve in collaboration with all stakeholders as part of the design and construct process.

Whilst the school was under construction, the Mernda Central stakeholder group was established, comprising the newly appointed Mernda Central P-12 College Principal, community members, prospective parents and educators from neighbouring schools, with the aim of developing the College's vision and culture, and responding to and informing the design and construction to give Mernda Central P-12 College its own sense of identity. Upon completion of construction, we have continued to engage with the newly established College community, staff and students in order to maximize the effective use of space and assist with the pedagogical affordances inherent in the design for Mernda Central College. This process is continuing during post occupancy.

SCHOOL & COMMUNITY ENGAGEMENT

Identify stakeholders

Due to the PPP process, the stakeholder groups changed throughout the evolution of the project, with key groups being:

LCV consortium stakeholders

- Sponsor Amber
- Building Contractor Watpac
- Community Partners YMCA & CERES
- Education Consultant Engaging Spaces
- Facility Manager Spotless
- Plus a multi-disciplinary sub consultant team

Government Stakeholders

- Victorian School Building Authority
- Office of the Victorian Government Architect
- Reference principals from local schools
- Education consultant Dr Julia Aitkin

Mernda Central Stakeholder Group

- Mernda Central P-12 College Principal
- Community members
- Prospective parents
- Educators from neighbouring schools

A highly consultative process formed the foundation of the development of the project, ensuring that all design decisions were fully tested against the project objectives and captured the pedagogical vision of this new school community.

Name challenges

While the New Schools PPP process provided key challenges in the highly structured delivery format, lack of upfront engagement with the local community (due to the bid process), and tight timeline for delivery, our team ensured that we utilised our significant expertise and experience to address these challenges and ensure they contributed to enhancing the success of the project outcome.

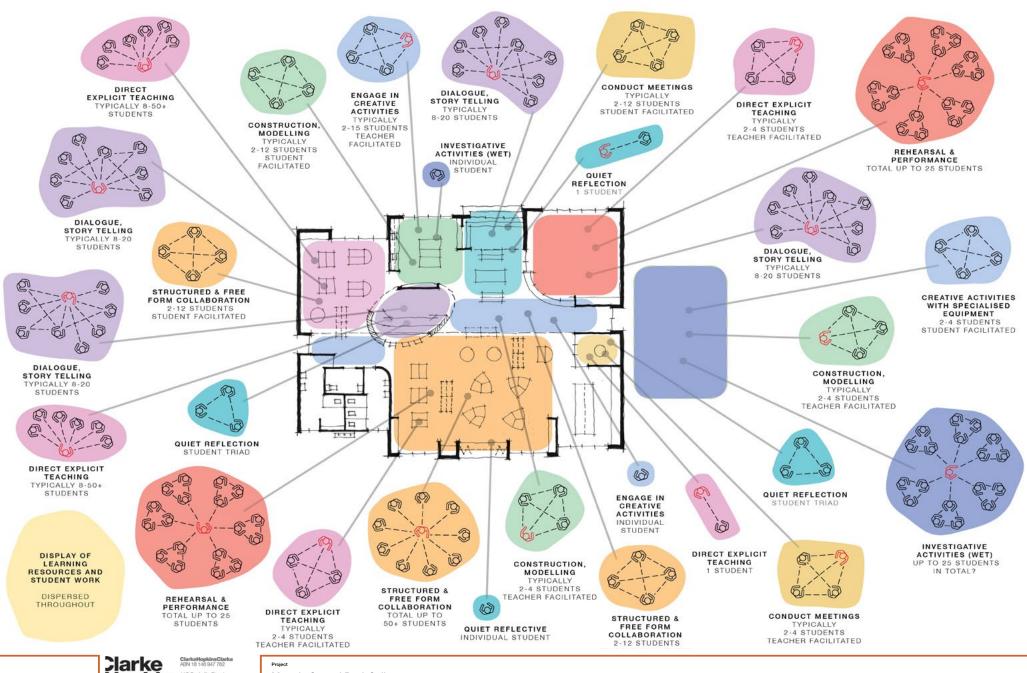
The unique delivery model of the New Schools PPP Project, which includes management of the design, delivery and ongoing maintenance of each school by the LCV Consortium, has facilitated a collaborative approach in relation to lifecycle cost and buildability considerations throughout the design process. We worked collaboratively with the school facilities officers to ensure that design decisions relating to the selection of materials and services infrastructure resulted in robust facilities that can be easily maintained throughout the next 25 years of the contract. We also worked closely with the building contractor to derive the most effective construction techniques and methods to maximise the design.

Describe the value of process and project to community at large

Designed to respond to the wider community context, the school provides a welcoming and activated street presence, strong community connections, and a valuable community resource that forms a central element in the evolution of this growing community.

A highly process driven approach has ensured that the initial brief has been translated and interwoven into every element of the Mernda Central P-12 College design response. The College has been designed to provide a safe, healthy and welcoming environment for everyone regardless of their age, gender, cultural background or ability. The design recognises the differing learning orientations and needs of learners, providing agile environments that allow students to flourish through learning in a way that best suits their needs. The design shapes a strong civic presence, creating a clear sense of identity and celebrating the importance of education within the community.







Mernda Central P-12 College Learning Settings

EDUCATIONAL ENVIRONMENT

Explain the educational vision and goals of the school

The planning process for Mernda Central P-12 College commenced in 2015, in response to a highly developed functional brief which provided a detailed rationale and functional specification. The four key education principles that capture the Department of Education and Training's vision and values, and form a strong foundation for the project brief include:

- Learners and learning are central;
- Community;
- Diversity; and
- Wellbeing.

Throughout the development of the planning and design process, the design principles were continuously tested against the project rationale. Our team worked with a DET reference group, including Educational and Learning Consultant Dr Julia Aitkin, various school principals, and the State Government Architect, to test the design against the brief. Numerous design review sessions were undertaken throughout each stage of the planning process, utilising an engaging and inclusive approach to ensure that each element of the design responded appropriately to the brief and project objectives.

Describe & illustrate how the environment supports the curriculum

Mernda Central P-12 College has been conceived as a place that students will want to attend, both during school and after school; an educational hub for children of all ages. The whole school site is a learning laboratory designed to support the social, physical and intellectual development of every student.

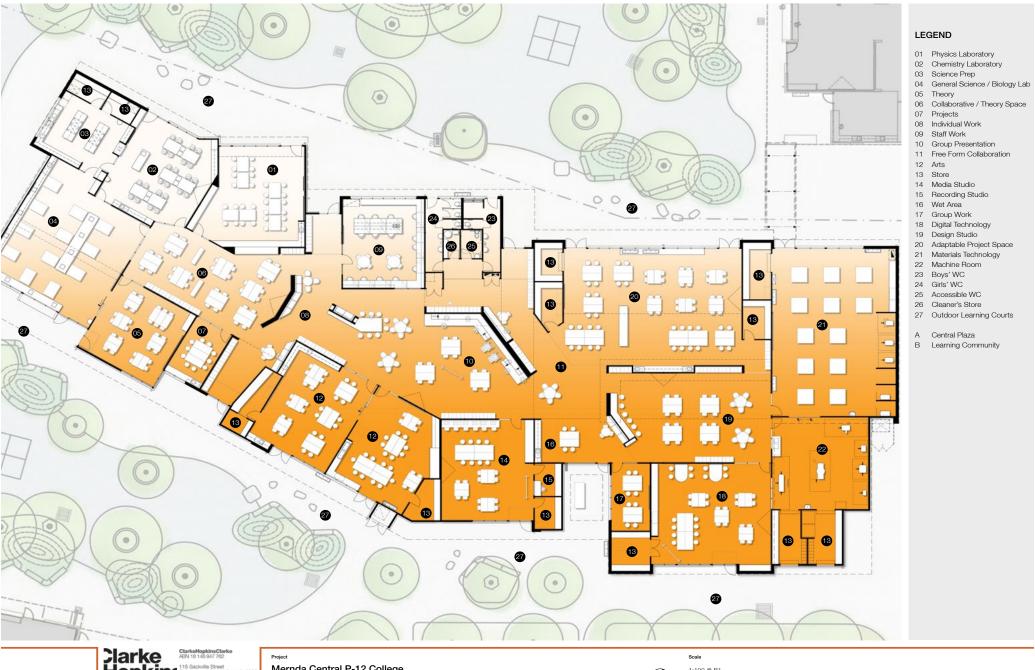
Mernda Cenral P-12 College features a variety of reflexive spaces which both inform pedagogical encounters and are informed by pedagogical encounters via a bidirectional relationship between the physical environment and the users. These reflexive spaces encourage teachers and students to engage in a variety of learning activities and experiences, and provide environmental cues that encourage ownership of the learning process. The learning environments have been design to support personalisation, active investigation, inquiry and collaboration. This is enabled in general learning areas through the interconnection of various spaces around a centralised pod. Such interconnection allows teachers, students and their learning materials to readily move between a range of settings, thus supporting many forms of collaboration.

Indoor/outdoor connections are enhanced through the provision of multiple doors to the outside as well as clear indoor circulation routes that support users to flow between indoor learning settings. This also facilitates choice and maximises opportunity to access outdoor learning settings, particularly those in close proximity to the learning communities.

Outdoor spaces have been designed as an integrated component of the total learning environment to afford more options for learning and teaching. Spaces such as in the Central Plaza provide alternative outdoor settings for small, medium and very large group gatherings, individual quiet reflection, reading/writing, small garden projects, construction and wet and messy activities.







EDUCATIONAL ENVIRONMENT

Describe & illustrate how the environment supports a variety of learning & teaching styles

Each internal and external space within Mernda Central P-12 College was designed to provide students with immersive learning experiences through opportunities to work inside or outside; individually, in small or large groups; within specialist areas which provide resources such as wet areas or presentation facilities; and to explore textured environments. Volume, form and scale create identity and personalisation which allows students to clearly identify zones and create their own sense of identity within larger learning environments. The use of scale and volume also allows students to have varying experiences within one space, from smaller, more intimate individual learning experiences such as in reading nooks, to stimulated collaborative learning experiences such as those in the messy play areas. Providing multiple spaces and opportunities for students to gravitate towards, where they feel comfortable, heightens their overall sense of enjoyment and wellbeing.







- 01 General Learning Area
- 02 Direct / Explicit / Story Telling / Dialogue
- 03 Meeting / Dialogue / Enquiry
- 04 Meeting / Conference
- 05 Staff Work
- 06 Quiet Reflection
- 07 Explicit / Collaboration
- 08 Rehearsal / Performance / Languages /
 - Direct & Explicit Instruction
- 09 Creative Activities
- 10 Creative Outdoor Learning
- 11 Boys' WC
- 12 Girls' WC
- 13 Accessible WC
- 14 STEM / Visual Art
- 15 Store
- 16 Services
- 17 Cleaner's Store
- 18 Outdoor Learning Courts
- A Central Plaza
- B Learning Community
- C Resources
- D Staff Lounge
- E Learn to Swim





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Hopkins 115 Sackville Street
Hopkins Colingwood Victoria Australia 308
Holpkins (20 3419 4340
Palestrian (20) 1419 4345
Palestrian (20) 1419 4345

Mernda Central P-12 College Stadium / Performing Arts / Food Technology / Community Hub



EDUCATIONAL ENVIRONMENT

Describe & illustrate how the environment is adaptable and flexible

Mernda Central P-12 College has been conceived as a learning laboratory designed to support the social, physical and intellectual development of every student. A key consideration throughout the design process was to ensure flexibility in the planning and design so that spaces can be configured to suit different pedagogical approaches or governance structures (e.g. student to teacher configurations) as the school grows and develops. Each of the four junior and senior learning communities reflect an agile learning model, providing complimentary and integrated spaces which cater to varied group sizes, student/teacher cohorts and instructional modes, including:

- Direct explicit teaching, demonstration and presentation;
- Structured and free-form collaboration and indoor games;
- Quiet reflective activities and individual research;
- Small and large group collaboration and meeting/ dialogue;
- Construction and other forms of play based experimental learning;
- Rehearsals and performances; and
- Individual or group collaboration IT zones.

The design of the Stadium / Performing Arts / Food Technology / Community Hub building also considers adaptability and flexibility of use, accommodating potential shared school and community use in all areas to respond to changes in the educational program and the changing needs of the local community.

The Community Hub provides a multi-purpose space which is adaptable in size to enhance the diversity of potential uses, and has been designed for use by the school during the day, to accommodate the YMCA Outside School Hours Care programs before and after school, and to be potentially utilised by the community outside of programmed usage hours.



LEGEND

- 01 General Learning Area
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- 14 STEM / Visual Art
- 15 Store
- 16 Services
- 17 Cleaner's Store
- 18 Outdoor Learning Courts
- A Central Plaza
- B Learning Community
- C Productive Garden





LEGEND

- 01 Airlock / Main Entry
- 02 Reception
- 03 Waiting Area
- 04 General Office
- 05 Interview / Counselling Room
- 06 Student Reception
- 07 Meeting Room
- 08 Conference Room
- 09 Female WC
- 10 Male WC
- 11 Accessible WC / Shower
- 12 First Aid
- 13 Secure Store
- 14 Business Work Area
- 15 Principal's Office
- 16 Senior Leadership Work Area
- 17 Male Staff WC
- 18 Change / Shower
- 19 Female Staff WC
- 20 Cleaner's Store
- 21 Staff Lounge
- 22 Staff Resources
- 22 Otali 11630ui
- 23 Store
- 24 Server
- 25 Technician Room
- 26 IT Service Counter
- 27 Resource Loans Desk
- 28 Work Room
- 29 Seminar Room 30 Junior Resources
- 31 Shared Resources
- 32 Secondary Resources
- 33 Adaptable Space
- 34 Staff Work
- 35 Music Practice
- 36 Recording Studio
- 37 Music Primary
- A Civic Forecourt
- B Outdoor Court
- C Staff Court
- D Carpark



PHYSICAL ENVIRONMENT

Describe & illustrate the physical attributes of the environment

The planning of Mernda Central P-12 College was developed in response to the character and history of the local environment. The design of the landscape incorporates indigenous plantings particularly in the environmental education area relating to the Scarred Tree, providing a link to the site's natural and cultural history.

Mernda Central P-12 College utilises a bold, contemporary aesthetic, both inside and outside to shape a strong sense of identity and activated street frontage. The school features single level built form articulated by a palette of bold contrasts, comprising predominantly masonry construction, durable metal cladding, and vibrant splashes of colour which link the external and internal areas and act as wayfinding across the campus.

Colour has been utilised to define active zones within the learning communities, with the application of colour providing students with certainty when orientating themselves within the larger learning spaces and providing cues to the type behaviour or learning activity which is to take place within that zone, as well as creating a visually stimulating and aesthetically pleasing environment. The colour palette drawings inspiration for the natural elements of Mernda, such as the Scarred Tree.

Large glazing areas and varied ceiling heights create a stimulating and enriching atmosphere, featuring an abundance of natural light and providing transparency between learning spaces. The architecture articulates the transition from early years to senior by varying the volumes and scale of spaces to create variety within the framework of a consistent language, and shaping a strong, cohesive sense of place.

Sustainability measures are incorporated to create healthy learning environments and minimise environmental impact, including:

- Siting buildings to maximise solar penetration for natural lighting and warmth during winter, to utilise air movements, and to protect entries and key external activity areas from prevailing winds.
- Ecologically enhancing and water sensitive urban design, including extensive native planting, market gardens, specialist landscaping and rainwater swale retention systems
- Passive shading design to reduce solar loads while providing good levels of daylight, views and external connectivity
- Low energy electrical systems, incorporating high efficacy lighting systems, occupant controls, daylight controlled high efficacy external lighting and site intelligent energy metering
- Integrated bicycle storage facilities to encourage the use of bicycles
- Planning to connect to existing pedestrian and bike paths.









PHYSICAL ENVIRONMENT

Describe & illustrate how the facility fits within the larger context of the community

Mernda Central P-12 College has been masterplanned to develop strong connections with the surrounding community precinct and to plan the facilities so as to provide opportunities for community use. The school masterplanning has been conceived according to a hierarchy of spaces - public, privileged and private - with public spaces such as the civic forecourt open for use by all members of the community, privileged spaces such as the games hall and community hub requiring greater security or care in their use, and private spaces such as the learning communities being secured for school use only.

The school was designed to shape a strong civic presence, creating a clear sense of identity and celebrating the importance of education within the community. The design features a civic forecourt along Breadalbane Avenue that links to and creates an integrated, accessible and welcoming family and children's precinct that links the adjacent Jindi Family Community Centre, with the new Learn to Swim School, the Administration and Resources Hub, and the Community Use Zone. The civic forecourt supports diverse community uses, including hosting a Thursday

morning farmer's market which enhances opportunities for community connection.

The School's outdoor active recreation facilities, asphalt courts and playing fields, have been located towards the eastern end of the school on Pomaderris Drive and adjacent to the passive open space and walking area to the south. This creates a larger activity precinct that can be utilised by the School and the surrounding community, particularly local residents.



PHYSICAL ENVIRONMENT

Describe & illustrate how the project inspires and motivates

Mernda Central P-12 College has been designed as a place for everyone regardless of their age, gender, cultural background or ability. The design recognises the differing learning orientations and needs of learners, providing agile environments that allow students to flourish through learning in a way that best suits their needs. Every space, be it indoors or outdoors, has a place for everyone, with both internal and external environments purposefully designed to cater to the different abilities, skills and interests of children at different ages.

The planning and design of Mernda Central P-12 College provides opportunities for people of all ages to experience enjoyment and delight. The variety and richness of the landscape provides opportunities for active play on the playing field or on the play equipment, exploring the natural world in the environmental education area and quiet reflection around the Scarred Tree. The sensory nature of the landscape has been carefully considered through the planting palette selected. The buildings are designed to provide high levels of comfort, thermally and acoustically, as well as visually by supporting strong connections between the indoor and outdoor learning areas and between learning communities.

Mernda Central P-12 College has been designed to address the varying needs of students, and to provide a safe, healthy and welcoming environment. The school is zoned to provide age appropriate environments that address the different learning and play needs of different age cohorts. Students in the early primary years have protected and welcoming facilities for learning and for play, located in close proximity to the administration centre and school entry, to enable young children to feel connected to senior staff and minimise their journey into and out of their learning community each day. The later primary years and secondary student zones provide a greater connection to the wider campus and reflect their progression through the campus, empowering students with a sense of ownership of the campus and promoting student wellbeing and safety.







RESULTS OF THE PROCESS & PROJECT

Explain how the project achieves educational goals and objectives

Comments from Mernda Central P-12 College Principal, Mandy O'Mara:

'Mernda Central College was constructed during 2016 and opened with 400 students from Prep to Year 7 in January of 2017.

The College was a much needed facility in the Mernda Community and has been designed and built to accommodate the rapid growth in the North West Corridor of Melbourne. The state of the art facility will ensure students receive a seamless education from Prep right through to Year 12 and ensures students have access to curriculum opportunities including food technology, design technology, music, performing arts and sports.

The College has been built as a community hub. The design of the facility has ensured easy access of sporting teams and community users and ensures the facility is embraced by the local community.

The adaptable and functional spaces have been embraced by students and staff alike. The high quality fixtures and special features, including reading nooks, tiered seating, bi-fold windows, and explicit instruction pods provide opportunities for all users to be creative and collaborative. The inclusion of green screens, recording studios and music practice rooms further enhance the opportunities. The workspaces provided for staff encourage collaboration and a space to reflect and plan. The storage both in the teacher work spaces and in fact right across the college is impressive and exceeds expectations.

The College has a real wow factor about it. It has a sense of grandeur and presence in the community. I am always proud to show around visitors. The STEM building and double stadium always draw gasps of disbelief from people seeing them for the first time.'

RESULTS OF THE PROCESS & PROJECT

Explain how the project achieves school district goals

The original brief for the delivery of Mernda Central P-12 College required the school to be complete for the commencement of the 2017 school year. Our team delivered the new school within the proposed timeline, with all phase mile-stones of the program adhered to whilst working in close collaboration with the Department of Education and project consortium. The school was designed to be cost effective, utilising simple forms, activating all parts of the campus environment for learning, designing to standard dimensions, and specifying robust materials to maximize the budget.

Explain how the project achieves community goals

The Mernda Central P-12 College has been conceived as a resource for the community, responding to the local context, reinforcing connections with existing community infrastructure, and providing shared facilities that extend the life on the campus outside of school hours. The project provides opportunities for the community to connect and celebrate the importance of education, which are crucial elements in growing the identity of a new and evolving community.

Explain any unintended results and achievements of the process & project

The partnership approach to the development of the new school has extended to key activation initiatives that add new dimensions to the offering for the local community. The Mernda Community Market has been established via a partnership between The Community Grocer, the school, Good Start Early Learning, Jindi Kindergarten, Whittlesea Council and the Brotherhood of St Laurence, and is held at the school on Thursday mornings. The market is looking to tackle food insecurity in Mernda, offering low cost produce to a community that is struggling with rising food bills, but also provides a practical means for the community to connect.

