



Empowering Innovation through Legacy

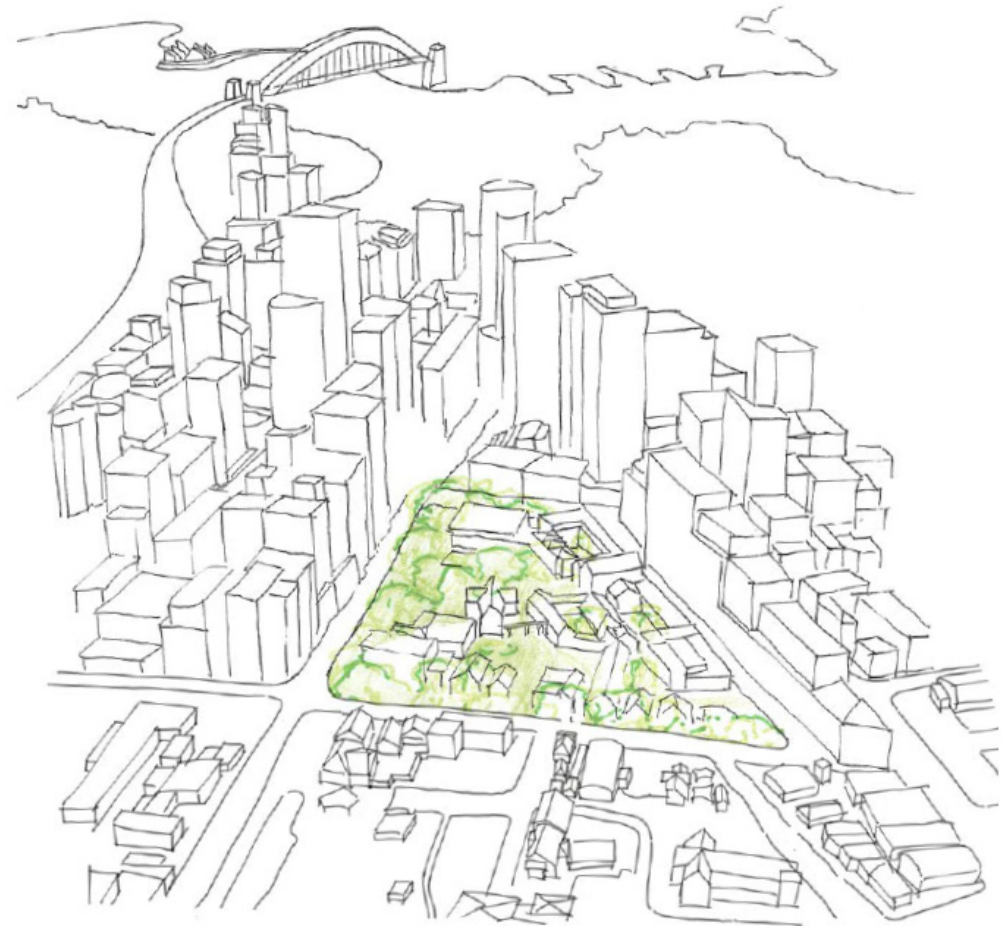
EXECUTIVE SUMMARY

The vision for Scientia Terrace was to enable the best in contemporary sports, STEM and social enterprise-based learning for girls, whilst responding to the layers of history on the heritage-listed site and creating a future legacy for the founding Sisters of Mercy, dubbed the walking sisters for their deep engagement with the local community.

Scientia Terrace at Monte Sant' Angelo Mercy College is a landmark project shaped through an inclusive co-creation process with students, staff, and the wider community that continued through the project into construction.

The six-storey facility integrates sports, STEM, and social enterprise within a cohesive vertical campus, anchored by a new circular lawn that enhances open space and campus connectivity. It includes a Social Enterprise Centre, sports and science facilities, and specialist environments such as a fabrication lab, innovation workshop, and pitch spaces, alongside outdoor learning terraces.

Adaptable, interconnected spaces foster collaboration, student agency, and real-world learning. Sustainability and well-being are embedded through passive design and seamless indoor-outdoor connections. Post-occupancy outcomes confirm its success in enhancing engagement and community connection, delivering lasting educational and social value.



Located on Cammeraygal land, Monte Sant' Angelo Mercy College campus is located in the heart of North Sydney. A roughly triangular site, it has interfaces to high density mixed use development across Miller Street to the East, Angelo Street to the west and Berry Street to the south. To the north across McClaren Street is North Sydney Council's civic precinct.



Identity &
Tradition



Transparency



Connection



Sustainability



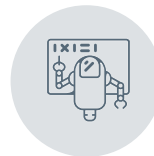
Adaptation



Diversity of
Learning
Environments



Nature &
Well-being



World Class

SCOPE OF WORK AND BUDGET

Scope of Work

- New six-storey vertical learning hub with STEM, Sports Science, and Social Enterprise learning spaces.
- New Social Innovation and Enterprise Hub, including a student-run Fair-Trade Café.
- New indoor sports and well-being facilities including indoor courts, gym spaces, fitness and sports science areas.
- Associated outdoor learning terraces, rooftop sports court, inter-campus connections, and a new circular lawn.
- Associated landscape, sustainability, and infrastructure upgrades.

“Scientia Terrace brightens our learning community as a dynamic learning haven; a place where people can thrive through collective creativity.”

ALLYSON MASCARENHAS, DEPUTY PRINCIPAL



\$48.9M

Total Construction Cost

\$54.0M

Total Project Budget

\$613.5

Cost per Square Foot

67.2ft²

Space per student

Community

Monte Sant’ Angelo Mercy College is an independent Catholic girls’ school serving students from Years 7 to 12. Established in 1875, it is the oldest independent girls’ school on Sydney’s North Shore and has a long-standing reputation for academic excellence and holistic education.

Grounded in the Mercy tradition, the College fosters a strong sense of community, emphasising compassion, service, and social justice alongside academic achievement.



Students
1186 Student population

Teachers
122 FTE Teaching staff
69 FTE Non-teaching staff

Sisters of Mercy

Social Justice groups like the Mercy Action Group advocate for causes including gender equality, climate action, and ethical consumption, while The Biamunga Program, run by Uncle Max, fosters a deeper understanding of Indigenous perspectives, and First Nations culture through regular gatherings and lessons.



Legacy

The College community is guided by the legacy of the Sisters of Mercy, and the College motto, *Religio Scientia Cultus* — shaped by what we believe, know, and value.

This rich heritage is deeply embedded in the physical and cultural fabric of the school, from its historic convent buildings to its ongoing commitment to social justice, service, and education for young women. While grounded in the Catholic Mercy tradition,

This enduring legacy continues to inspire a strong sense of identity, purpose, and belonging, empowering students to become compassionate, capable leaders who contribute meaningfully to their communities.



Stakeholders

The design team engaged meaningfully with the following key stakeholder groups throughout the visioning, design and delivery process.



Governance School Executive Team

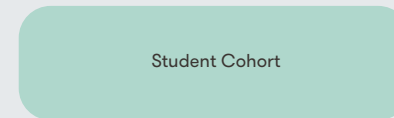
Providing strategic leadership and overseeing project governance, the School Executive Team **ensured alignment with the College’s vision and priorities.**

As the primary decision-making body, the team **guided key initiatives and maintained accountability** across all stages of planning and implementation.



User Insight Staff

Offering invaluable user and pedagogical insight, staff leaders were engaged in providing briefing aspirations, teaching and learning requirements through an **ongoing feedback process.**

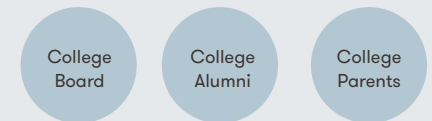


User Insight Students

The student cohort were a key stakeholder in the development, providing valuable insight into their **expectations for contemporary learning environments.**

Key Challenges

- **Ensuring a diversity of voices shaped the project’s direction**
As the first implementation of the new College masterplan and pedagogy vision, the stakeholder structure was intentionally inclusive, providing both the College and broader community with meaningful opportunities to contribute.
- **Ensuring project accountability and adherence to process.**
Strong project governance was essential to ensure compliance with complex funding requirements and to maintain accountability at every stage



Community College Board, Alumni, & Parents

Community voices shaped the project at multiple levels - with each stakeholder group contributing distinct and valuable perspectives.

The College Board provided **strategic direction**, ensuring the design aligned with the **College’s long-term vision, governance priorities, and educational philosophy.**

Parents contributed practical insights into **student well-being, safety, and the need for supportive, future-focused learning environments.**

College Alumni offered a broader perspective - connecting the project to the **College’s heritage and reinforcing values that endure beyond schooling.**

SCHOOL AND COMMUNITY RESEARCH AND ENGAGEMENT

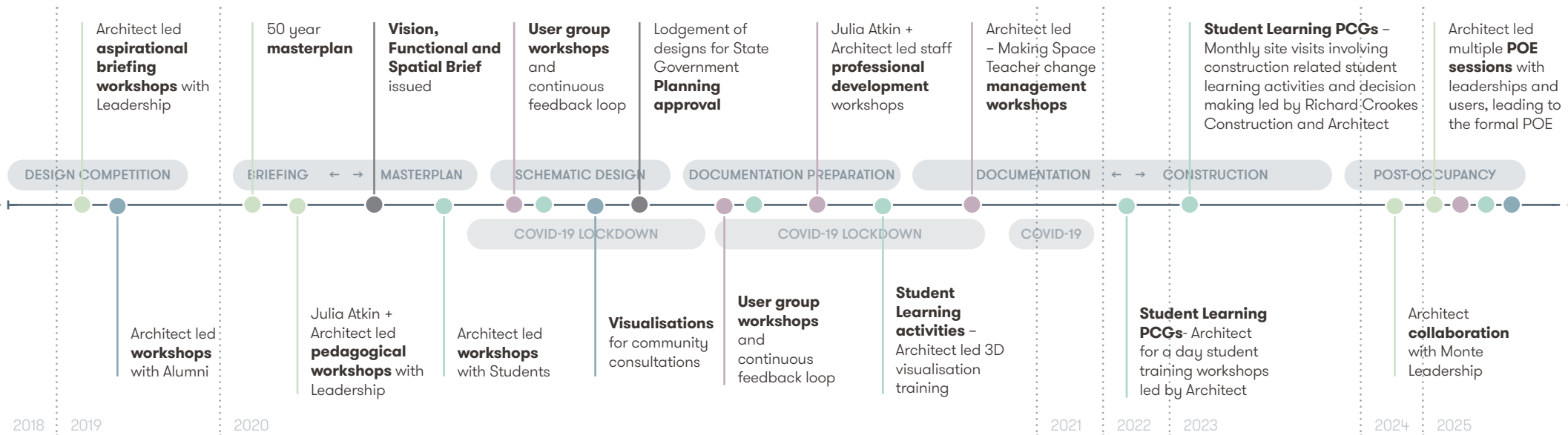
Key phases of the visioning process.

The planning process for the Scientia Terrace building reflects a **long-term partnership** with Monte Sant’ Angelo Mercy College and the design team, iteratively exploring and responding to the school’s **evolution and growth** through its history.

From the outset and through the design and construction phases, Scientia Terrace served as a catalyst for learning, with both staff and students actively learning through their direct involvement in the project.

Key Challenges

- **Covid-19 Lockdown Restrictions**
Victoria’s strict Lockdowns prohibited face-to-face stakeholder engagement, requiring rapid adaptation to remote consultation
- **Commercial Challenges and Delays**
Workforce shortages and supply chain disruptions led to cost escalations and delays across the
- **Construction Timeline.**
The tightly built site required continuous careful logistic measures during construction to minimise disruptions to the school’s daily operation, which contributed to the prolonged construction timeline.
- **Significant Flooding Events**
- **Educational Design Challenges**



Pedagogical Workshops

Various workshops with staff and leadership enhanced the detailed pedagogical brief helping to ensure that the design best enabled the required learning activities.

Change Management + User Manuals

During later phases, workshops were facilitated to help educators understand the spaces being delivered, and to plan their learning activities to suit the new facility. Towards completion of the project user manuals were created for each space to graphically demonstrate to educators how each space could be programmed and adapted.

Construction Phase Learning

During construction, various structured learning activities allowed collaborating professionals such as architects, project managers and builders to engage deeply with staff and students to enhance their learning about design and construction.

Post Occupancy Evaluation

Post-construction, the evaluation of how the facility supports the school’s objectives through:

- Recorded observations of use
- Staff and student surveys and feedback
- Analysis and reflection on outcomes
- Insights to inform future phases of development

Stakeholder Groups



Process: visioning, value of process and project to the community, how the engagement fostered diversity, equity, and inclusion.

SCHOOL AND COMMUNITY RESEARCH AND ENGAGEMENT

The value of reimagined community engagement.

This project began in 2018 as a design competition to prepare a Masterplan for the college. Recognising that collaboration is key to achieving successful outcomes, the Architect team conducted workshops with staff and students as part of the competition process which continued throughout the project and fostered a deeper understanding of the school's context and opportunities.

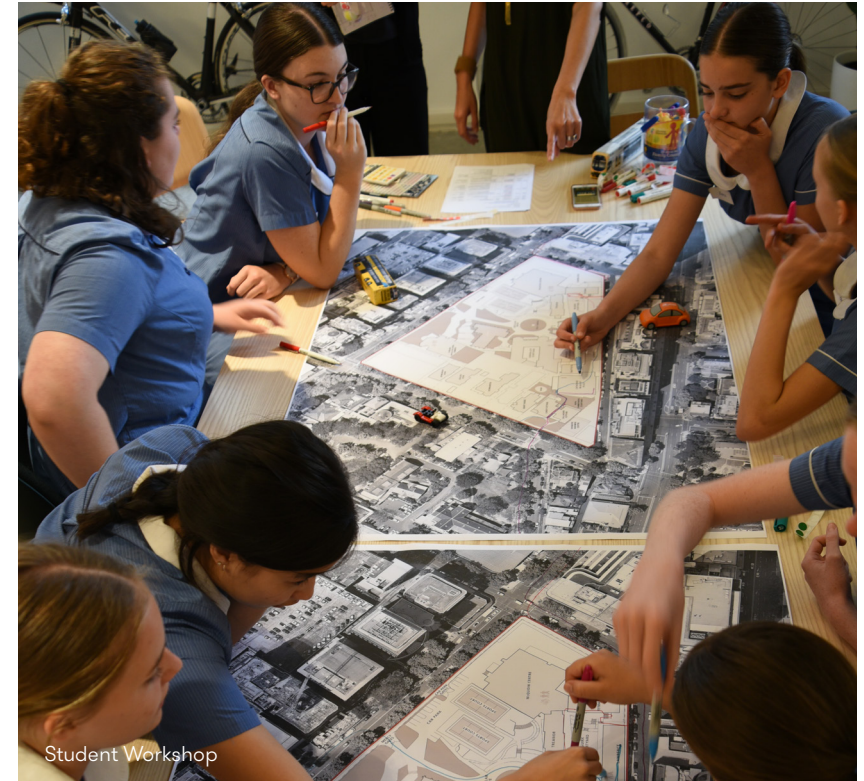
In addition, the project team visited numerous exemplar projects and engaged with the Mercy Sisters to learn about the rich Mercy story and history of the site. This led to further workshops with school alumni, elders and parents, enriching the project's foundation.

Key objectives across the workshops were to understand:

- How the school campus enabled or constrained the Monte Values;
- The historical and current student experience at Monte;
- The Executive staff campus experience;
- How school facilities could enhance and sustain the broader school community;
- Aspirations for the future vision of the campus.



Leadership Group Workshop



Student Workshop



Alumni Workshop



Learning by Design Workshop - Julia Atkin



Exemplar Project - Client Tour



Mercy Heritage Centre Visit



Aboriginal Elders Smoking Ceremony

Process: visioning, value of process and project to the community, how the engagement fostered diversity, equity, and inclusion.

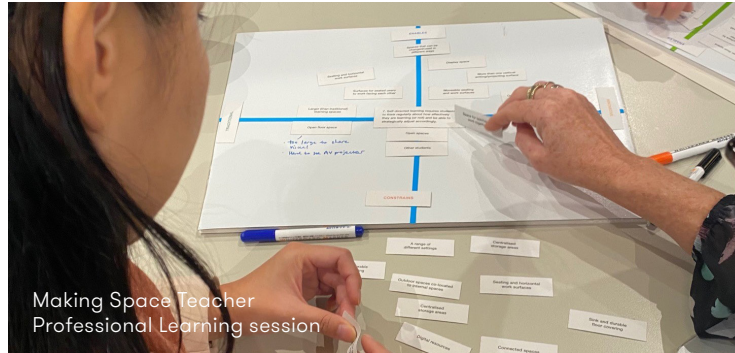
The value of ongoing engagement to completion.

Recognising the importance of transition, the team continued to build stewardship of the project in partnership with the Builder during construction. A Student PCG was set up and met monthly, building knowledge for students and staff around design and construction. The students undertook structured learning and enrichment programs around design and construction.

Additionally, the architect collaborated with the school to create a User Manual for the building and hosted a Making Space Teacher Professional Learning session which aimed to enhance staff spatial literacy in preparation for the new learning spaces. Extensive POE was also completed.

“ Our work on this project illustrates how a successful co-creative approach can facilitate well-being, communal learning, and deep social connectivity

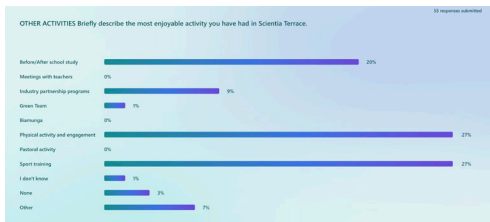
ARCHITECT



Making Space Teacher Professional Learning session



Student PCG - Architect for a Day Enrichment Workshop



Learn Profile
Level 3
Science, SP, PDHPE, Co

Learn Profile
Level 4
Practical L

Learning Space Profiles
Level 5
Shared Practical Lab, Theory/Demo Labs



Student PCG - Site Visit



Client Facade Prototype visit

Process: visioning, value of process and project to the community, how the engagement fostered diversity, equity, and inclusion.

SCHOOL AND COMMUNITY RESEARCH AND ENGAGEMENT

A new school building needs to capture the spirit of the school and it's community by reflecting the past, responding to the present and enabling the future.

In collaboration with Dr. Julia Atkin, an education and learning consultant, the college leadership team and staff user groups explored new science and sport facilities. Further student workshops investigated ways to enhance the science, technology, engineering, and mathematics (STEM) learning experience for girls. These discussions also revealed how the new building could also include a Social Enterprise Centre to embody Mercy values while providing creative and practical spaces that inspire girls' education.

A comprehensive educational brief and program of requirements were developed and continuously refined through regular meetings with the College's building committee.

As a result, a series of eight Guiding Design Principles emerged which became cornerstones for the design proposition.



Identity & Tradition

Showcase Mercy values and convey the Mercy experience - heritage, legacy and mission.



Transparency

Improve transparency throughout the school from micro (between spaces) to macro (across campus)



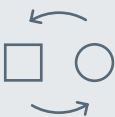
Connection

Create accessible, functional and ambient circulatory routes throughout the school that encourage incidental interactions.



Nature & Well-being

Include more greenery throughout the site including real grass and trees for shade.



Adaptation

Ensure learning spaces can be reconfigured to adapt to evolving pedagogical and technological needs.



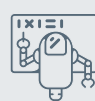
Diversity of Learning Environments

Create a diverse range of learning spaces including more collaborative settings.



Sustainability

Environmental sustainable design to ensure user comfort (temperature, light, sound, airflow)



World Class

Create world-leading state-of-the-art new facilities

Key Challenges

- **Interpreting intangible cultural values and educational visions into spatial design outcomes**
Synthesising a deeply embedded cultural legacy, and a comprehensive pedagogical vision for the College into a spatial design brief
- **Maintaining engagement continuity across project phases**
Sustaining stakeholder involvement from early competition stages through design development, construction, and post-occupancy (including Student PCG meetings and POE) posed challenges in keeping participants informed, invested, and aligned over time.
- **Balancing aspirational outcomes with practical constraints**
Aligning ambitious visions for the future campus experience, with budget, program, and construction realities required careful negotiation and expectation management.



- Student Movement
- Executive Movement

Campus Movement Mapping

During both workshops, students and executives mapped their daily pathways through the school and indicated their perception of the quality of spaces along their route.

Process: visioning, value of process and project to the community, how the engagement fostered diversity, equity, and inclusion.

“The building bridges learning across disciplines from science through to sport offering amenity to the whole school

MEG, TEACHER



Educational and Physical Environment

Site and Masterplanning

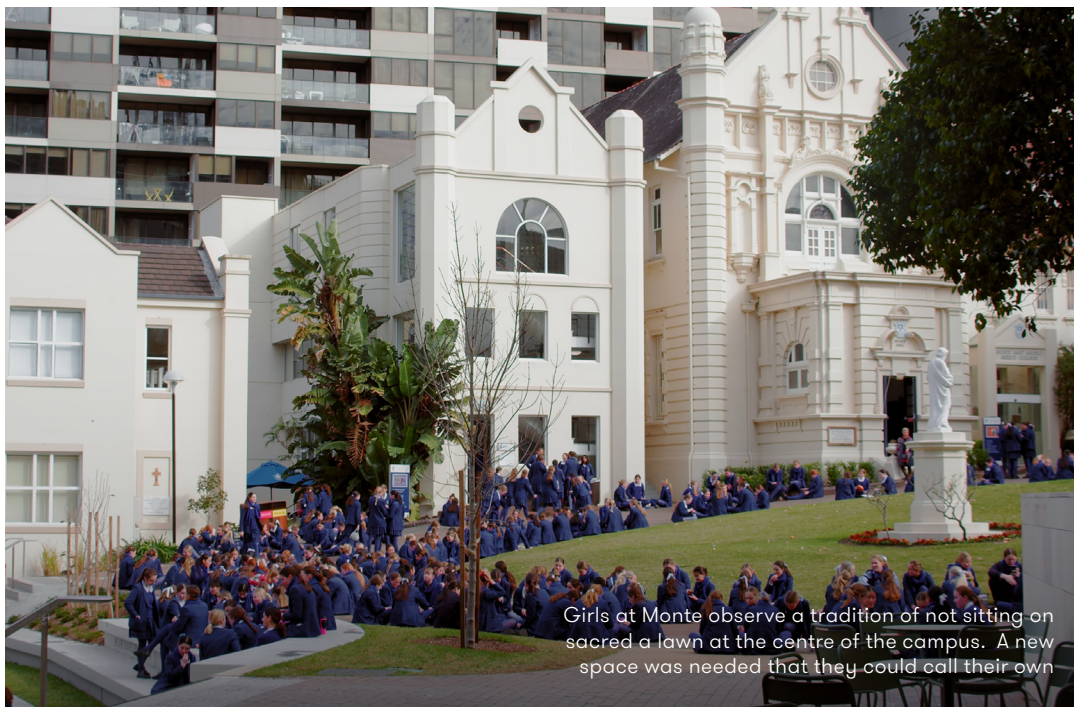
The broader campus, shaped by its **heritage-listed context** and **layered history**, lacked clearly defined and connected learning precincts, creating fragmented relationships between buildings, open spaces, and circulation paths. Existing facilities, including sports and visual arts buildings, were functionally disconnected, and the lack of cohesive landscape strategies reduced legibility across the site. While cultural elements such as the **Holy Lawn** shaped student use of outdoor space, opportunities for inclusive and flexible gathering areas were limited.

Through consultation we understood the importance of gathering spaces across the campus and the masterplan sought to create a series of legible and varied learning precincts anchored around new and existing cloistered gardens.

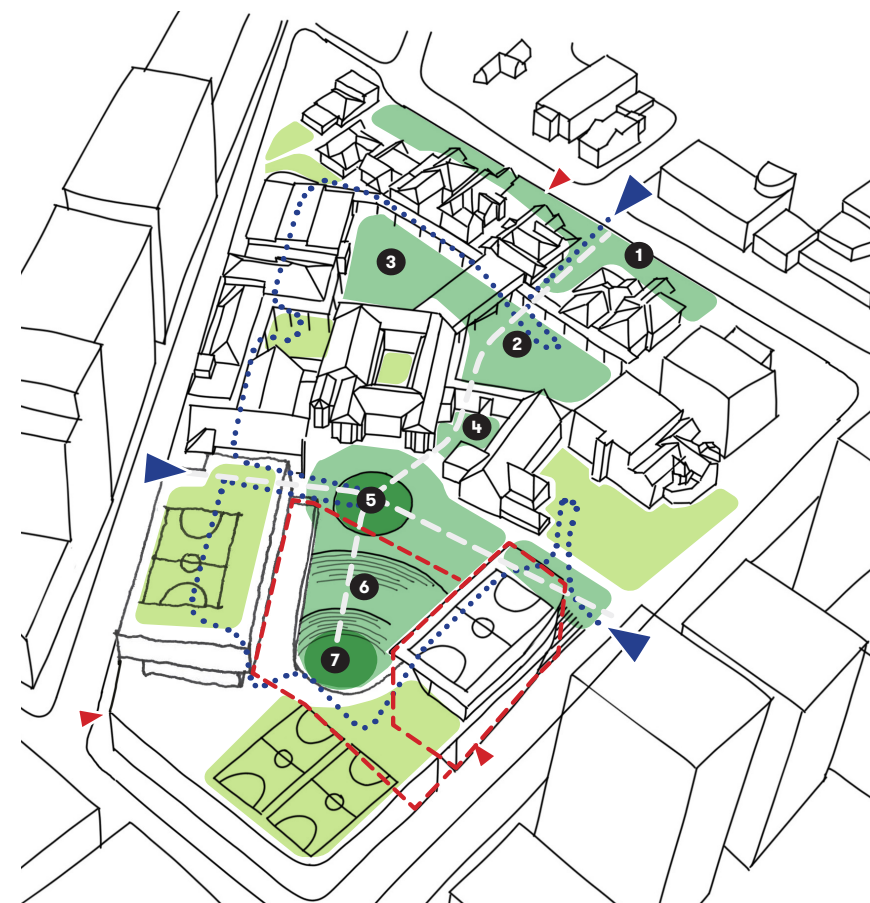
One of the stories we uncovered during master planning was that the girls at Monte observe a tradition of not sitting on sacred a lawn at the centre of the campus, which is called the Holy Lawn. Instead they sit in circles around it. We thought there was something lovely about that tradition, but we wanted to give the girls a landscape that was theirs to inhabit.

So at the south of the campus a new circular space was proposed. The girls have completely owned the space call it affectionately the **Unholy Lawn**.

And we thought this created another lovely legacy connection to a third sacred circular space on the campus the Nura Cammeraygal Pond linking first nations, the sisters, and the girls.



Girls at Monte observe a tradition of not sitting on sacred a lawn at the centre of the campus. A new space was needed that they could call their own



- | | | | |
|---|-----------------------|-------|----------------------------------|
| ① | Front Lawn | - - - | Scientia Terrace Site |
| ② | Welcome Garden | ■ | Primary Courtyards |
| ③ | Nura Cammeraygal Pond | ■ | Secondary Courtyards |
| ④ | Chapel Grotto | ▶ | Key Pedestrian Points |
| ⑤ | Holy Lawn | — — — | Formal Pedestrian Entry Sequence |
| ⑥ | Scientia Amphitheatre | | 'Walking Sisters' Legacy Trail |
| ⑦ | Unholy Lawn | ▶ | Vehicle Entry Points |

Context: Physical attributes of the environment including building and site, and how it fits into the larger community context.

EDUCATIONAL AND PHYSICAL ENVIRONMENT

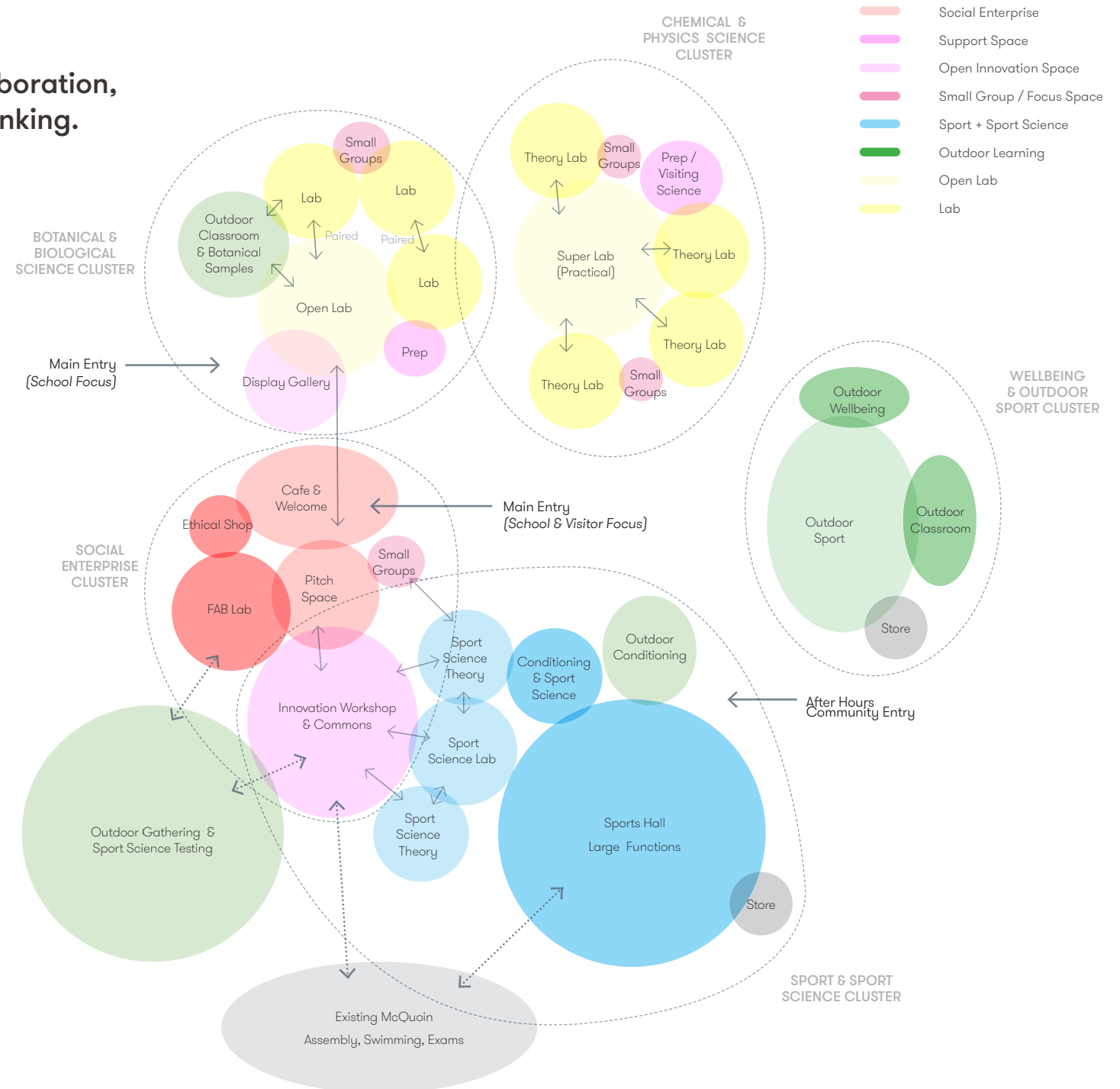
Fostering a learning culture of collaboration, belonging and cross-disciplinary thinking.

Following briefing a detailed spatial relationship diagram was created based on a series of clusters designed to enable learning focussed on **Sport, Sport Science, Social Enterprise and Science**. Each interlinked cluster provided a range of setting to enable learning on a range of scales, each clusters being anchored around multi modal project based collaboration zones.

Both the **Botanical & Biological Cluster** and the **Chemical & Physics Science Cluster** enable varied learning programs tailored to specific types learning, collaboration, investigation and study. The Science faculty enables display spaces in creative ways to not only showcase items and artefacts but to 'store' resources that would otherwise be hidden away.

The **Social Enterprise Cluster** houses Social Justice and Student Action groups including Green Team, Mercy Action Group and Biamunga Mob. Spaces like the Forum, Fair Trade Cafe and collaboration zones are utilised by these groups as meeting spaces as well as break out spaces for small group work

The **Sports Science Cluster** provides new gym spaces for cardio, strength and conditioning enabling a new physical activity and engagement program for all students. This is combined with a rooftop enabling play, well-being, outdoor sport and botanical study. The health and fitness spaces enable the College to undertake postdoctoral research (in partnership with UTS) to investigate the role of physical activity for neurodiverse adolescent girls and the effects on well-being and educational outcomes. Additionally, the indoor courts can be transformed into an 1800-person venue.



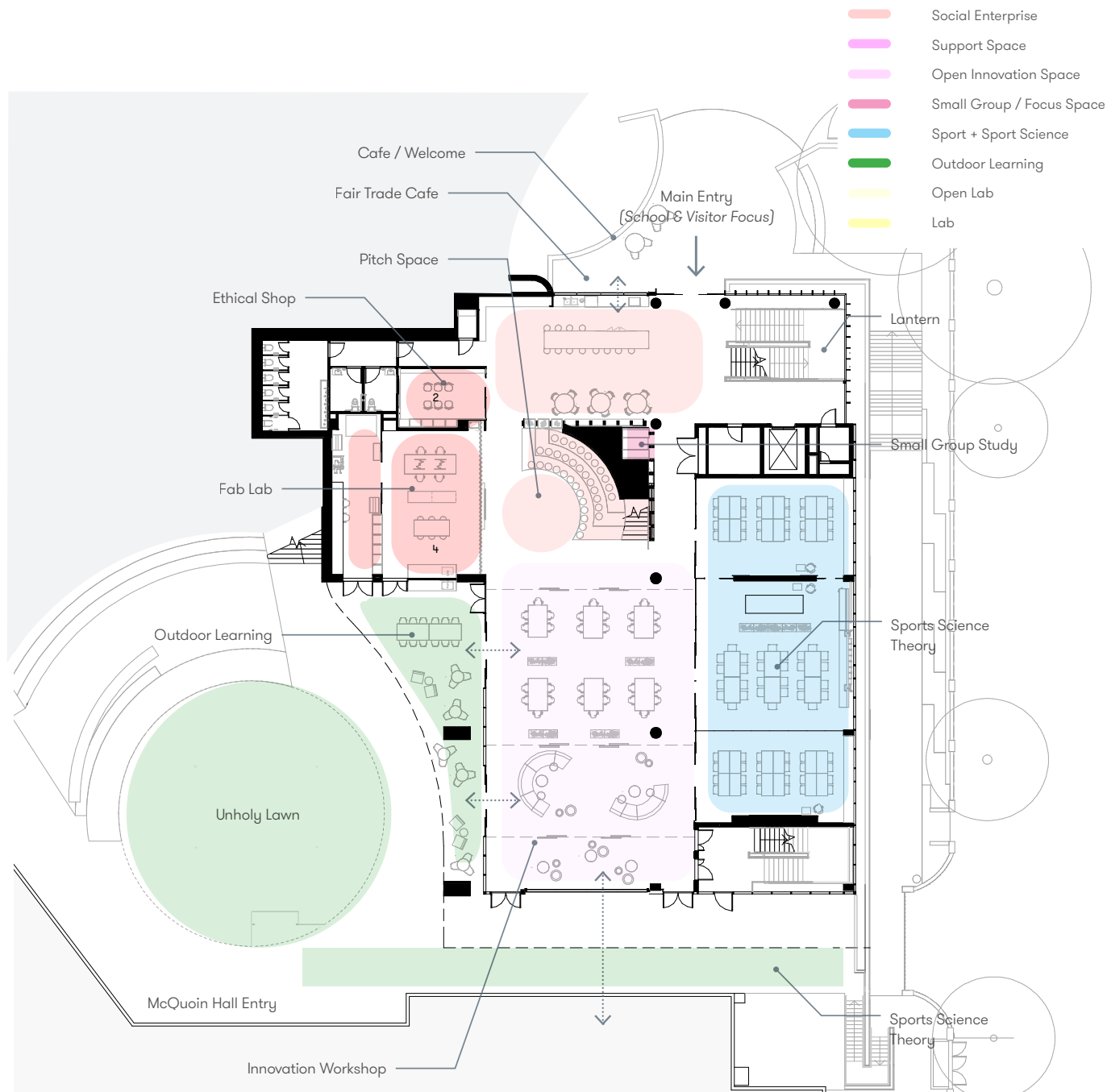
EDUCATIONAL AND PHYSICAL ENVIRONMENT

Level 3 Floor Plan - Social Enterprise & Sports Science

On the primary entry floor at Level 3, the spatial sequence of Scientia Terrace unfolds from the Unholy Lawn into a vibrant, student-centred hub that seamlessly integrates social enterprise, collaboration, and innovation.

Entry is anchored by the student-run **Fairtrade Café** and ethical shop to the north, embodying the Mercy tradition of hospitality while activating the edge of the building as a welcoming, social interface. From here, the plan opens into a central collaboration zone and forum space, supporting gatherings, exhibitions, and informal learning, and acting as a shared base for social justice groups and wider community engagement.

Connecting directly into the collaborative workspaces, the **Innovation Workshop** and the **Fab Lab** provide hands-on prototyping and manufacture. Surrounding these core spaces are flexible, acoustically enclosed learning areas for sports theory and science, enabling both structured teaching and adaptable use for programs such as entrepreneurial initiatives, and pastoral care.



0 2.5 5 7.5 10m

Response: Innovative aspects of the physical environment that supports variety of learning and teaching styles

EDUCATIONAL AND PHYSICAL ENVIRONMENT

The Scientia Terrace: A new learning and specialist hub for future leaders.

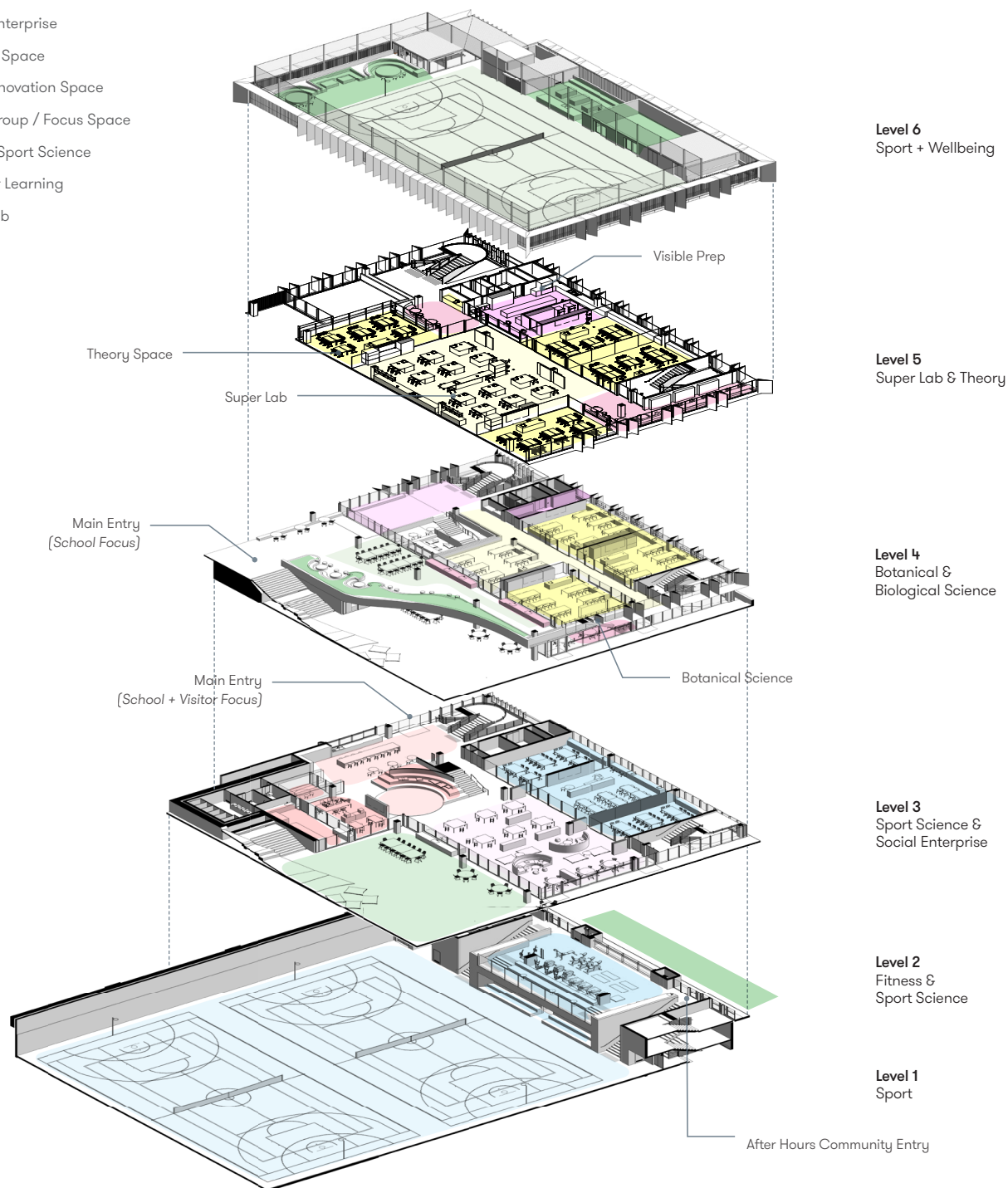
On **Level 1**, the large volume of the Sports Centre allows for dual functionality, easily adapting to events such as the Year 12 Graduation ceremony.

On **Level 3**, the Social Innovation and Enterprise Hub supports a wide range of pedagogies. This space includes the Fab Lab for hands-on making, the Innovation Workshop for research and collaboration, and the Pitch space for presentations.

The Science labs on **Levels 4 and 5** include a mix of open and more defined spaces to support a range of pedagogies. A series of sliding screens and folding writeable partitions can be used to reconfigure the space to support varied modes of learning.

Informal collaboration booths and quiet independent workspaces are strategically placed throughout the building, reflecting the dual nature of science research, which integrates both hands-on experimentation and writing up findings. Opportunities for display are integrated throughout to inspire future female leaders.

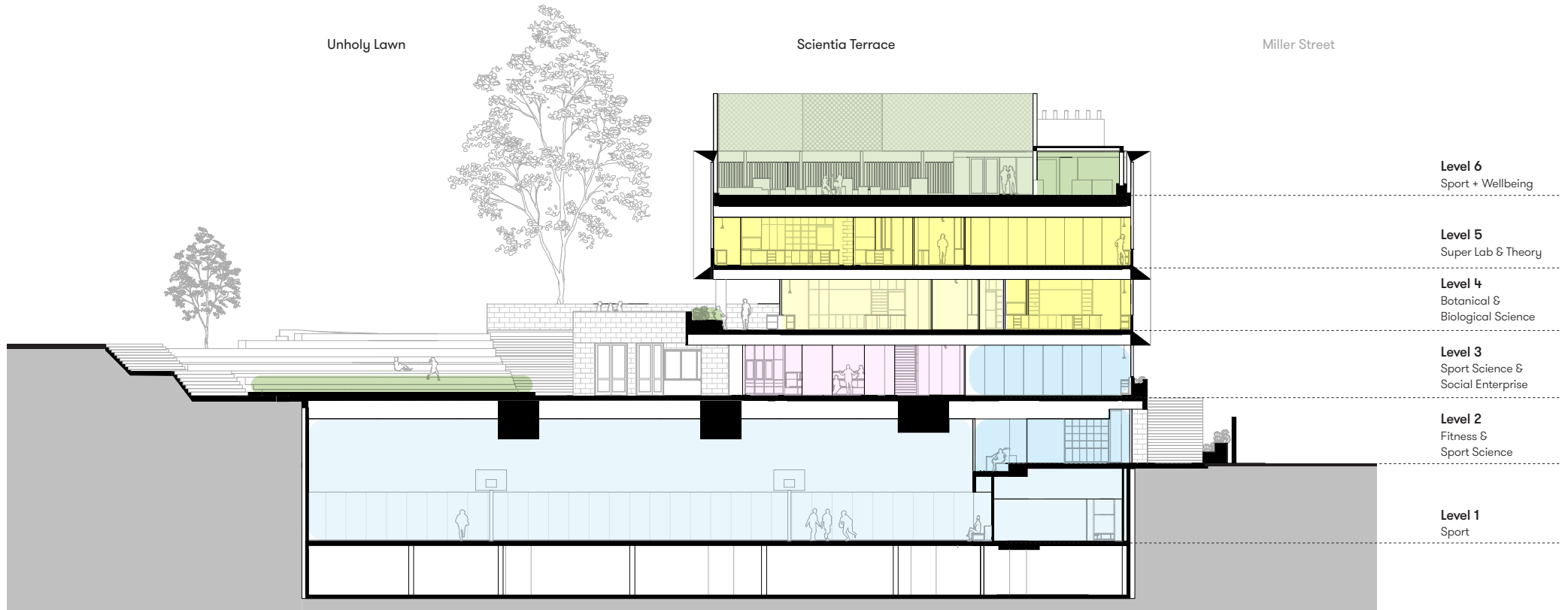
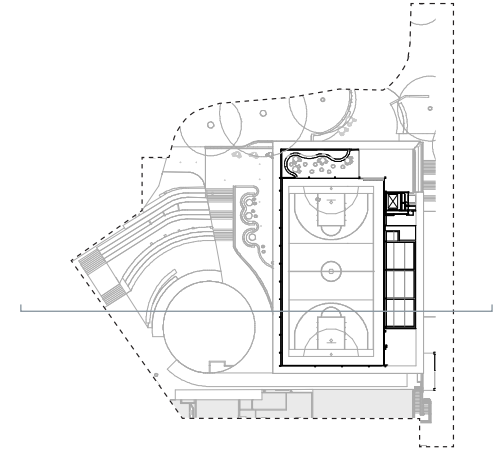
The building is woven into its context, and outdoor learning is maximised throughout. **Level 6** features an outdoor sports court and informal lounge and gathering areas. This space reinforces the site as an oasis in the city, offering students a place to relax, socialise and play.



An innovation hub of possibility, designed for evolving ways of learning.

The building is rationally ordered – spaces to the east of the plan are typically more acoustically contained while spaces to the west are more bespoke and flexible. A series of voids are cut into the rectilinear floorplates, **enhancing vertical connectivity and amenity**. Outside space is treated as precious as space within, and seamless transitions are created from inside to out to allow learning to continue directly onto various outdoor terraces, supporting learning and well-being. **ESD initiatives** are varied including deep reveals, passive shading, solar, low CO2 concrete, rainwater reuse, low VOC specification and mixed mode ventilation.

The above-ground floors of Scientia Terrace are contained within a rectilinear form floating over a sandstone base that sinuously connects to the landscape.



Response: Innovative aspects of the physical environment that foster sustainability and wellness

EDUCATIONAL AND PHYSICAL ENVIRONMENT

Connectivity to Landscape

A new circular lawn is created at the south of the school, providing much-needed occupiable landscape space. The girls have completely owned the space, affectionately calling it the “Unholy Lawn”. The new lawn provides connection to two other sacred circular spaces on the campus – the “Holy Lawn” and the “Nura Cammeraygal Pond”

“Connectivity is central to the Scientia experience with a range of outdoor learning terraces and spaces bridging learning opportunities from inside to out.

Deep reveals allow for passive sunshading

Unashamedly contemporary, the building references the rhythm and patterning of heritage buildings on the site

Roof level sports court is a protected space, integrated behind the bladed facade

Environmental comfort is enhanced through a combination of passive shading, deep reveals, low VOC specification and mixed mode ventilation

Direct adjacency to heritage chapel

The circular terraced landscaping provides a social gathering space for the students

Integral biophilia across all levels supports botanical investigation and wellbeing



Tiered amphitheatre style seating with defined seating

A series of outdoor learning terraces promote opportunities for learning and social interaction

Unholy Lawn



College motto intergrated into the terraced seating.

Social Innovation and Enterprise Hub - Fair Trade Cafe

“Inherent to the Mercy tradition of being “welcomed with a cup of tea”, a student-run Fair-trade Café offers a friendly entry experience to the building

Display screen for graphic imagery and messaging

Direct connection to Innovation Workshop, amplifies the synergies between each function

Student led Fair trade Ethical Shop

Direct connection to Innovation Workshop, amplifies the synergies between each function

Operable serving window to connect to outdoor seating area and Welcoming terrace.

Student led fair trade cafe servery bench to display student-made products.



Cafe style tables for informal gathering of students, staff and visitors

Long bench style seating promotes community gathering, power enables individual study, laptop use and event based catering



Response: Innovative educational environment that fosters diversity, equity, inclusion, sustainability, and wellness.

Social Innovation and Enterprise Hub

“A circular Pitch Space to discuss ideas and welcome visiting experts... A place to nurture tomorrow's female role models.”



EDUCATIONAL AND PHYSICAL ENVIRONMENT

Super Labs

The Science labs on Levels 4 and 5 include a mix of open and more defined spaces to support a range of pedagogies. A series of sliding screens and folding writeable partitions can be used to reconfigure the space to support varied modes of learning.

Automated louvres allow mixed mode ventilation via BMS

Acoustic baffle ceilings supports successful large group demonstration

Central demo bench allows space for all student congregation

4 screen dual sided AV connected to overhead camera enhances visual connectivity to demonstrations

Dual sided fume cupboard opens to enhance visual connectivity

Direct connection to adjacent theory space. Large acoustic glazed sliders allow these spaces to operate together or independently

Direct visual connection from circulation and breakout spaces into classrooms



Resilient flooring includes group work zonings to define varied collaboration modes

Open superlab space connects to 4 theory spaces, accommodates up to 2 class groups facilitating practical activities

Standing height benches accommodate storage and allow quick transition to practical learning

Adaptable furniture to support STEM based activities with integrated resource storage



Easy to access resource storage to support study

Response: Supporting variety of learning and teaching styles that supports curriculum.

Empowering learners through social wellness and inclusion.

Monte Sant' Angelo Mercy College expressed a strong vision to embed **social well-being** and **agency** into the learning environment, ensuring all students feel seen, supported, and empowered to thrive.

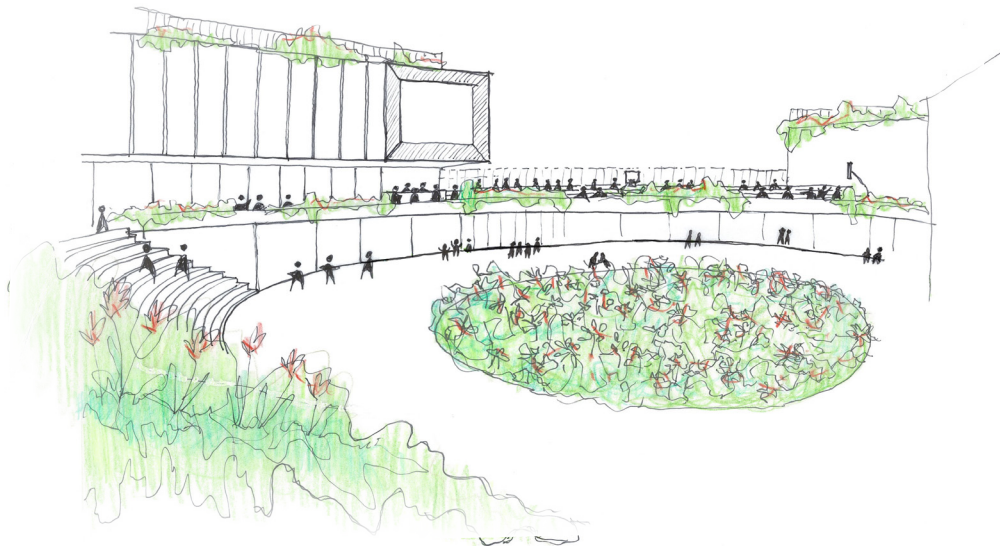
Scientia Terrace fosters inclusive and adaptable learning by embedding flexibility and collaboration into every aspect of its design.

The facility supports diverse learner needs through a highly reconfigurable mix of spaces. Interconnected 'super labs' with operable walls and collaborative work benches - to acoustically controlled, private study retreats, allowing students to choose environments that best suit their learning at any moment.

Seamless connections between indoor and outdoor terraces, combined with vertical voids and visual transparency, foster a continuous flow of movement, interaction, and shared learning across disciplines.

Diversity, equity, and inclusion are embedded throughout the facility design:

- Neurodiversity is supported through thoughtful spatial planning, acoustic treatment, and a calming colour palette.
- Accessibility is prioritised with equitable access to all learning settings for students of all abilities.
- Cultural inclusivity is reflected in spaces that respect and support the diverse needs of both staff and students.



Visual connections through circulation corridors into classrooms encourages collaboration, informal interaction, and visibility of learning, helping students feel supported while promoting a more inclusive and engaging educational experience.



Allowing students choices on furniture, setting, noise, position within a larger space, light or temperature can provide the ownership required to enable them to feel comfortable.

EDUCATIONAL AND PHYSICAL ENVIRONMENT

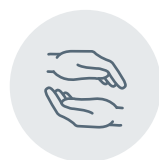
Empowering responsible, future-ready leaders.

Promoting environmental stewardship is a core value of Monte Sant' Angelo Mercy College, with the facility designed to showcase sustainable initiatives and embody the philosophy of the built environment as an active educator.

Supporting student learning and well-being through a combination of passive and active sustainable features, the building becomes a dynamic learning tool for students.



Energy Efficient
Integrates renewable energy systems to improve building efficiency.



Stewardship
Promotes environmental stewardship as a dynamic learning tool for students.



Wellness
Supports well-being with acoustic, ventilation, and glazing solutions that ensure optimised comfort and noise control.

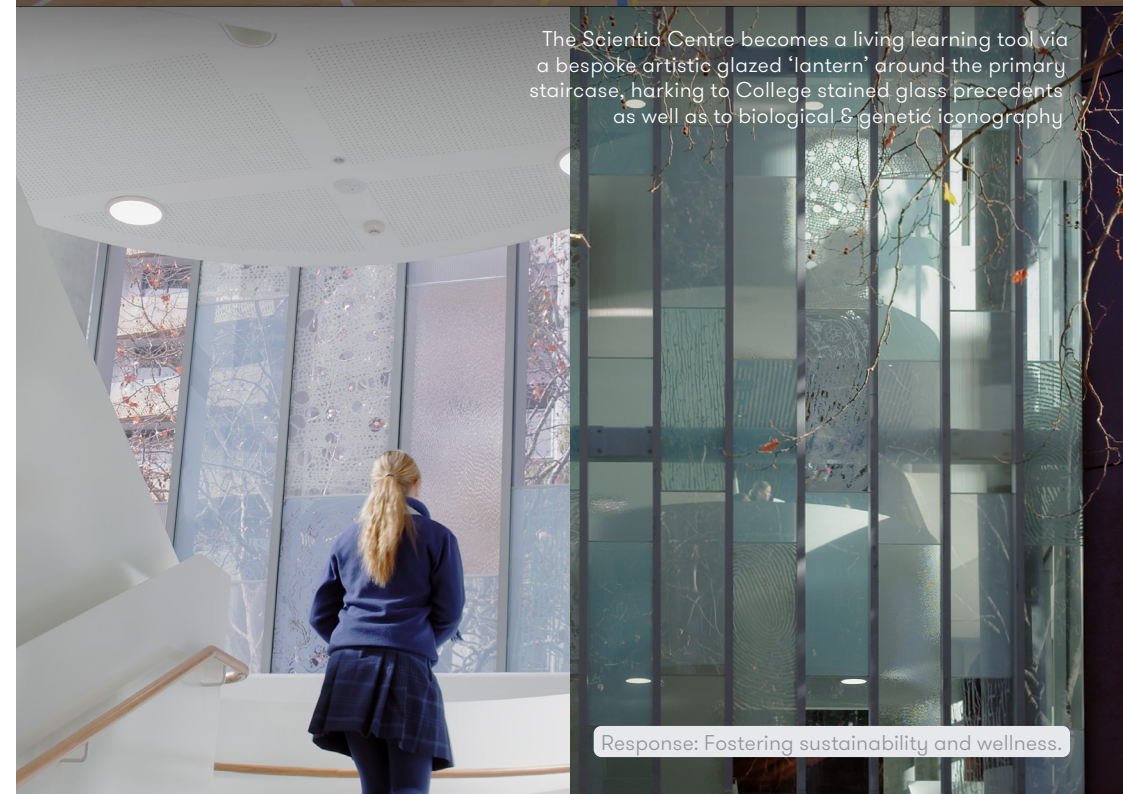


Responsible
Commits to locally sourced materials, FSC / PEFC certified timber products and Local Jobs First initiative.

- Empowering future leaders with a facility that is grounded holistic approach to learning at a local
- People focused – both at a personal, community & global scale.
- Sports science focus – building a deep understanding of the benefits of good physical health & fitness
- Social Innovation & Enterprise Hub, Fair Trade Café & Ethical shop – learning initiatives nourishing mental & spiritual health of students & the broader school community
- Celebrating ESD initiatives – real life & evident embodiment of College commitment to environmentally sustainable principles
- Building as living learning tool, celebrating College heritage whilst embracing future scientific exploration & technologies



Physical education & fitness programs are paired with sports science & biometrics study to build a deeper understanding of the wellbeing benefits of good physical health



The Scientia Centre becomes a living learning tool via a bespoke artistic glazed 'lantern' around the primary staircase, harking to College stained glass precedents as well as to biological & genetic iconography

Response: Fostering sustainability and wellness.

Results

Whilst unashamedly contemporary, fins, filigree, materials and tones reference elements and forms found elsewhere within the heritage context. Appropriate to a STEM facility, refraction of light became a consistent theme, fluted and coloured glass is used extensively, and a contemporary stained-glass lantern was developed integrating varied DNA X-rays



A realised vision of Monte's educational ambitions.

Informed by Monte Sant' Angelo Mercy College's vision for contemporary, future-focused learning and shaped through an extensive co-creation process with leadership, students, staff, parents, alumni, and the Sisters of Mercy, the guiding principles established from project inception are realised in thoughtful and innovative ways throughout Scientia Terrace.

The building successfully delivers a dynamic and connected learning environment that reflects the College's commitment to holistic education, cross-disciplinary collaboration, and student-centred development. The Scientia Terrace strengthens both the physical and social fabric of the school through adaptable learning spaces, fostering innovation, well-being, and leadership, while setting a benchmark for integrated and inclusive learning environments.

“Not only does the space now act as a functional education hub, but it also doubles as a space for recreation and retreat - building a sense of identity for more users, as well as connection to the land, the place, the history and the people that use it

DR. JULIA ATKIN, EDUCATION CONSULTANT



Showcases Mercy values by embedding the College's heritage, mission, and commitment to social justice into both its design and purpose, allowing students to transform outreach programs into meaningful action.



Improving transparency throughout the school at both micro and macro scales by creating strong visual connections between learning environments.



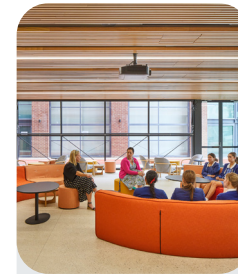
Creating accessible, functional, and ambient circulatory connections by using open pathways, vertical voids, and strong indoor-outdoor connections that encourage movement and interaction throughout the building.



Strengthen the connection to place through biophilic design to improve well-being, comfort, and environmental quality.



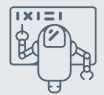
Adapting to evolving pedagogical and technological needs through a highly flexible and interconnected design.



Employing a diverse range of learning spaces by providing a mix of open, flexible, and specialised environments that support both collaborative and independent learning.



Integrating passive and active strategies to improve user comfort in temperature, light, sound, and airflow.



Combining advanced STEM, sports, and social enterprise spaces with innovative programs and partnerships, giving students direct access to industry expertise, and advancing technology and facilities.

RESULTS

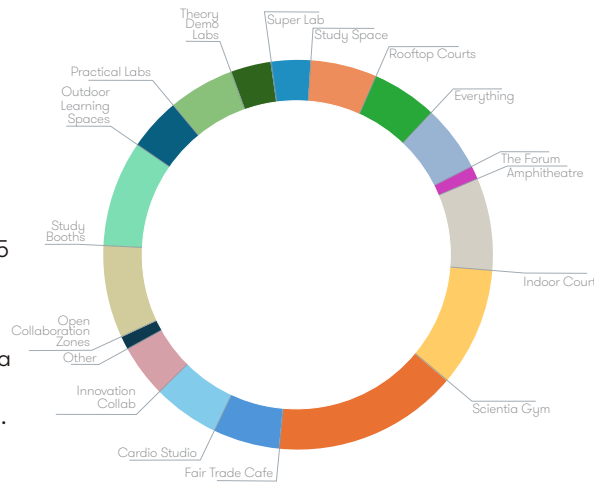
Post Occupancy Evaluation process and results.

A Post Occupancy Evaluation (POE) survey was issued at the end of 2024 after the building had been occupied for 18 months. 55 responses were received from Years 8 to 12.

68% of students noted that they preferred working in the Scientia Terrace compared to a normal classroom. 64% also felt that lessons in the Scientia changed their way of learning.

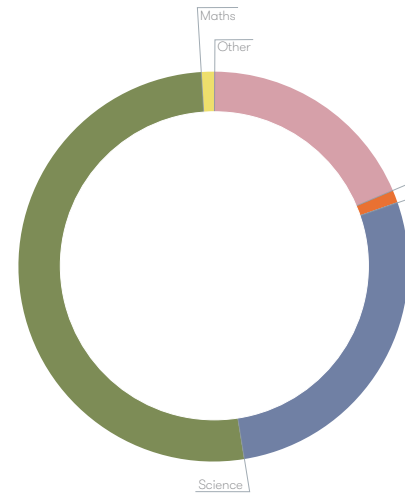
Common themes related to:

- The abundance of natural light and connection to nature in the space.
- The positive benefits of the whiteboard surfaces as sliding screens and tables for both collaborative work and exam study.
- Having a comfortable and contemporary place to study with friends before and after school.



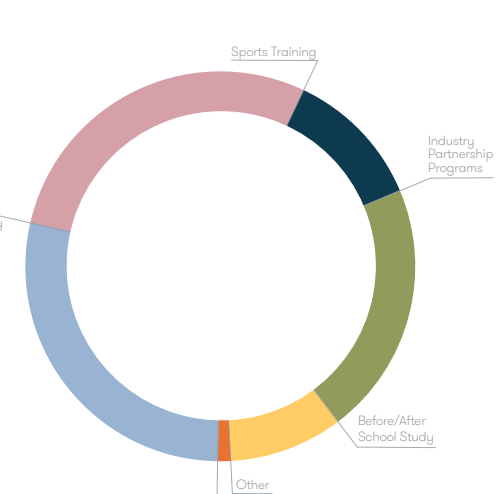
What facilities or resources do you enjoy using in Scientia Terrace?

A mix of the collaborative spaces, as well as the Indoor Courts and Gym facilities were proven to be the most valued resources to the students.



What is the most enjoyable class in Scientia Terrace?

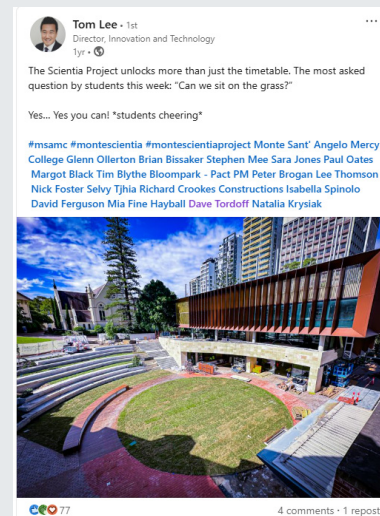
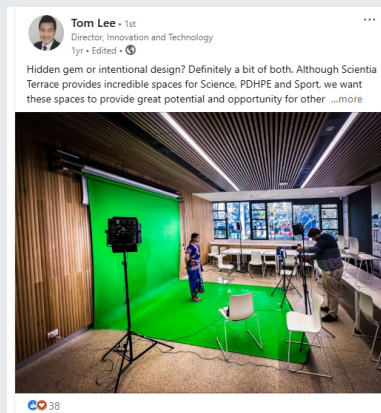
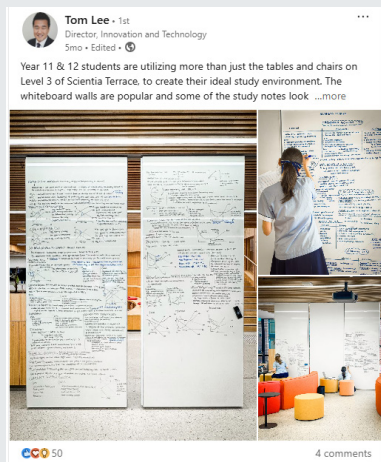
Science classes run in the Super Lab, Practical and Theory classrooms were the favoured learning environments.



What is the most enjoyable activity in Scientia Terrace?

The new sporting facilities, again proved to give the students the most value for out-of-hours activities.

SCIENTIA TERRACE IN ACTION



RESULTS

More than a place for learning, the facility enriches in unexpected ways.

The Scientia Terrace successfully achieves school district and community goals by:

- Delivering a dedicated STEM and Sports-Science Hub that enables cross-disciplinary learning, purposefully designed to serve the wider college community.
- Elevating the existing social justice programs that are led by the students, through the design of the Fairtrade Cafe and Social Enterprise Centre.
- Promoting the extended use of the college's facilities by providing a broad range of learning and study spaces, giving the students access to the building after-hours.

Beyond its core teaching and learning objectives, the diverse and purposeful spaces within the Scientia Terrace have enabled the school to explore new programs and deepen engagement across the entire community. These include:

- Guest speakers in the Pitch Space
- Student socialisation around the Unholy Lawn and outdoor learning spaces

These unintended achievements are already reshaping the aspirations of future facilities on the campus.

“Scientia Terrace surpasses our expectations and embodies innovation and a commitment to a contemporary Mercy education for girls. It aligns with the College’s philosophy, effectively catering to the diverse needs of students and teachers.

TOM LEE, DIRECTOR OF INNOVATION AND TECHNOLOGY



RESULTS

Healthy minds, healthy bodies, healthy buildings.

Scientia Terrace successfully achieves its sustainability goals through a combination of passive strategies that enhance comfort and well-being, and active systems that improve energy efficiency and lower operational costs.

Importantly, sustainability -identified as a guiding principle of the project - is elevated beyond a building performance outcome to become a **dynamic learning tool**, promoting environmental stewardship among students through visible, interactive systems.

The building employs passive design strategies such as deep façade reveals and shading to reduce heat gain, alongside mixed-mode ventilation to improve air quality while minimising energy use. Material choices, including low CO₂ concrete and low-VOC finishes, reduce embodied carbon, extensive solar panel PV and supports healthier indoor environments, while rainwater reuse and extensive daylighting further enhance resource efficiency.

Paving the way for lasting impact.

Value for money and **responsible investment** were central to the College's approach to funding this project. With the addition of **government support came a heightened level of accountability.**

Notwithstanding this oversight, **the facility does not compromise on innovation**, it redefines expectations of what a contemporary and inclusive learning space can be.

Informed by a thorough post-occupancy evaluation, the building will now serve as a **blueprint for future campus facilities**, strengthening staff teaching practices and delivering lasting value and impact for the entire school community.

“This project's success reflects the dedication and vision of our entire educational community, and we eagerly anticipate the positive impact it will have on future generations of students.

TOM LEE, DIRECTOR OF INNOVATION AND TECHNOLOGY

Passive strategies to enhance comfort, well-being and reduce energy demand include:

- Optimal building orientation
- cross ventilation to learning spaces
- Maximising natural light to learning spaces
- Generous roof over for weather protection to outdoor learning areas

Active systems to elevate energy efficiency include:

- Roof top solar panels for energy generation
- Heat recovery incorporated into the air -conditioning system to minimise energy use
- A building management system (BMS) and display that monitors energy systems operations, a real-time learning tool for students

