

Rising populations are putting pressure on Australian schools.

Educators, particularly in our urban regions, are reflecting on their school's future needs, including the design of their campuses, to support forecasted growth.

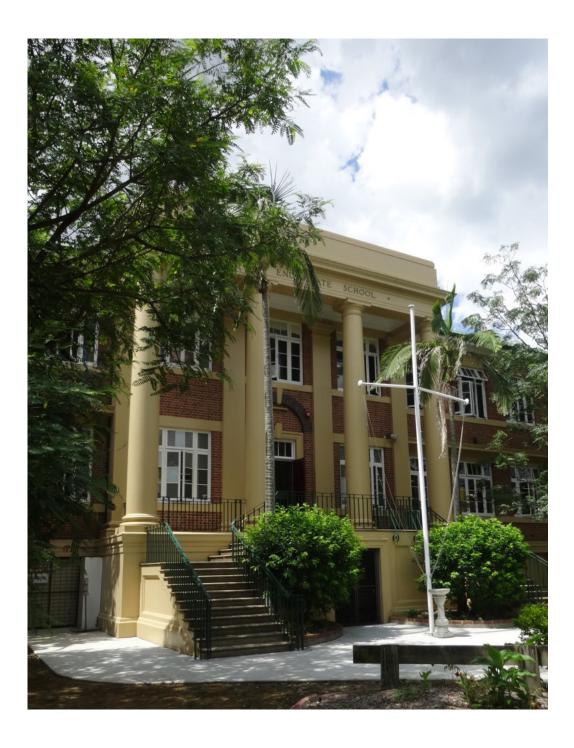
Master plans can be helpful in providing a strategy for the development of the whole campus.

A well-designed master plan leads to better long-term planning, and shapes plans for future growth and investment, while guarding against costly short-term missteps. The contemporary school campus is no longer only just about formal and informal learning spaces, but about student experience and creating a sense of community.

A successful master plan reflects the history and legacy of the place, and provides an aspirational vision and cohesive guide for future capital allocation.

This e-bite provides case studies that demonstrate the true benefits of a master plan and why they're fundamental to supporting growth in your school.





CASE STUDY

WEST END STATE SCHOOL MASTER PLAN

Brisbane, Queensland

For many years, West End State School was interested in commissioning a master plan. School leaders recognised the rapid growth rate and transformation taking place in the local community, and subsequently, increasing pressure on the School's intake.

In 2014, Wilson Architects was commissioned to design the master plan, the first since the School's establishment in 1875.

The goal for the plan was to maximise the School's footprint and efficiency of the site without losing elements that contribute to its special character.

Determining the need for community engagement

From the beginning, Wilson Architects understood the need for strong engagement and information sharing with both the school community and wider community.

To establish this close engagement, open and transparent communication processes were put in place.

Wilson Architects hosted a series of four workshops with the leadership team, parents, teachers and Year 6 students, creating a forum for each group to openly voice their feedback.

The workshops focused on four factors; place, community, teaching and learning, and service support. Discussions on each topic were captured and used in reporting, which later contributed directly to the final master plan design.

The design team also facilitated a parent and community information night held at the School.

The community had previously not been consulted on their opinion of similar developments in the area. Wilson Architects received extensive feedback from the School on the many benefits of hosting workshops and wider community discussion forums – each group stated they truly felt they were being heard.

The final master plan document was designed in a clear and concise way, which allowed the School to easily share and communicate their strategic vision with the wider West End community.







Proposed site plan, West End State School

Identifying challenges and opportunities

Population explosion

By 2030, West End is predicted to absorb 22 per cent of Brisbane's total growth – with the current local population of 11,000 households more-than-doubling to 25,000. The Draft Kurilpa Master Plan does not, however, allocate any additional land for education in the area.

According to the South East Queensland Regional Plan: Implementations Guidelines for 2009-2031, West End needs four primary schools in its current state alone to cope with the large numbers of residents. It presently has two.

West End State School therefore needed to manage overcrowding by re-planning the available space on their current site.

Landlocked site

Previous governments permitted for land in West End, which had been earmarked for future education, to be sold to developers. These blocks are now the future sites of thousands of new apartments that will soon house local families. A 2014 study by the West End State School's council indicates the region needs 700 new primary school places to effectively cope with demand.

As a landlocked site, the School has no formal drop off points and is lacking in civil infrastructure, causing constant congestion and traffic in the local community.

Surge in apartment living

At West End State School, 62 per cent of student live in units. With increasing apartment developments in the local area, and thus higher numbers of students living in units, the School needed to develop a curriculum to support additional physical activity.

There was a concern that play space at the School would soon become a problem.

Buildings used by both school and community

Due to the increase in unit dwellings, the West End community was particularly passionate about retaining community space that was available for use outside of school hours.

Community facilities on the site contribute to the character of the School, which was something Wilson Architects were passionate about retaining and celebrating. The pool, tennis courts, hall and after school care are all heavily used throughout the year and support the School's engagement with the community.



Responding to the challenges

Population explosion

The master planning process took into account rapidly changing demographics and lifestyle choices. Wilson Architects worked with the School to plan twelve new classrooms, new labs and a new resource centre. The proposed master plan design increased student capacity by 41 per cent, from 820 to 1160.

Landlocked site

Wilson Architects investigated how many students the community was comfortable having on site. This data was included in the master plan and relayed back to the community for comment.

While there were previous discussions on the feasibility of utilising adjacent sites, the master plan's intent was to review the current site only. Wilson Architects proposed a sustainable school model of development and density that aligned with the School's strategic goals. This included an improved use of existing space, and developing outdoor classrooms and environment curriculum space in line with the Strategic Plan.

Surge in apartment living

The sports oval is seen as an important element of the School's identity and a vital community asset as density in West End continues to increase. Wilson Architects respected the need for outdoor green space, by retaining the oval in its original place, and designing a new courtyard area. This courtyard was proposed as an open play space with the potential to be used as an outdoor classroom.

The master plan design provided a 77 per cent increase of covered outdoor space to support both play and learning. STEM learning spaces were designed for flexible group work, and also provided a combination of indoor/outdoor learning areas.

Buildings used by both school and community

Wilson Architects planned outdoor spaces that would encourage interaction with the local community, and provide additional support for students without overstepping capacity. The existing hall was very well used by the School and wider community, but had no ventilation, poor acoustics, and made assemblies difficult to manage. Wilson Architects proposed a new School Hall above a lower level car park to better support gatherings of the School and local community.

"Wilson Architects really listened to the community feedback, and as a result, the plan they designed was so wonderfully received."

Judy Thompson, past Principal, West End State School

CASE STUDY

MUELLER COLLEGE MASTER PLAN

Rothwell, Queensland



The Mueller College master plan is very different to West End State School's, as the College is set on a suburban site.

In 2014, the school commissioned Wilson Architects to investigate strategies to unite Prep, Junior, Middle School and Senior School, across a number of different precincts. This would allow for students in each year level to be exposed to other age groups.

Consolidating year groups would help to grow the culture of the school, and give clarity back to where it was previously lacking across existing precincts.

Mueller College is a Christian school that has progressively grown to a population of over 1300 since 1990. The College is part of a church-run site that includes a retirement village and a childcare centre.

The relatively new school was set up with funding by the local Christian community. As such, buildings on the site were typically prosaic and economical. New infrastructure and, importantly, landscape strategies were designed to create seamless new interventions.

Overcoming traffic issues

Mueller College had major traffic access issues when coming into the school. There was conflict over student pedestrian access and vehicles arriving at the entrance.

There was also a wonderful natural asset in a lake at the centre of the school, that the College wasn't able to access or utilise because of their traffic issues.

Wilson Architects overcame the challenge by creating a college square that would be seen as the heart of the site, and would provide clearer entry points for both cars and students.

Working with the curriculum

The College has recently incorporated a hospitality program for students, whereby they learn to cook food for the coffee shop, and serve the public. Similarly, the Five Stones Theatre Company (which will provide both Certificate III and Diploma courses) will be housed in the new Arts Cube.

Wilson Architects needed to consider the function of all spaces on site to support the curriculum and hands-on approach of the school. The master planning process articulated Mueller College's education needs into buildings and social learning spaces.

Understanding a school's values

As a Christian school, Mueller College holds its own special values and vision. It's extremely important for an architect to understand and reflect every institution's heritage and culture – in this case, a history of teaching and learning, functional community, and gospel.

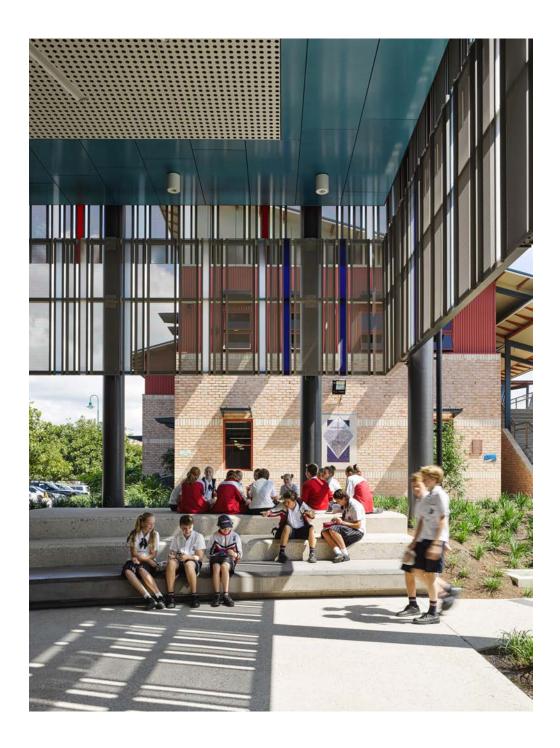
Wilson Architects designed meditative outdoor community spaces to support reflection and prayer.



Proposed site plan; white buildings are existing, blue showing new interventions of the master plan

"There's this whole new revitalised energy at the College
– not much happened on campus for a long time. Now
we're in a growth phase following the master plan –
students keep on coming. People can see the huge
amount of energy and enthusiasm we're exuding."

Paul Valese, Principal, Mueller College



CASE STUDY

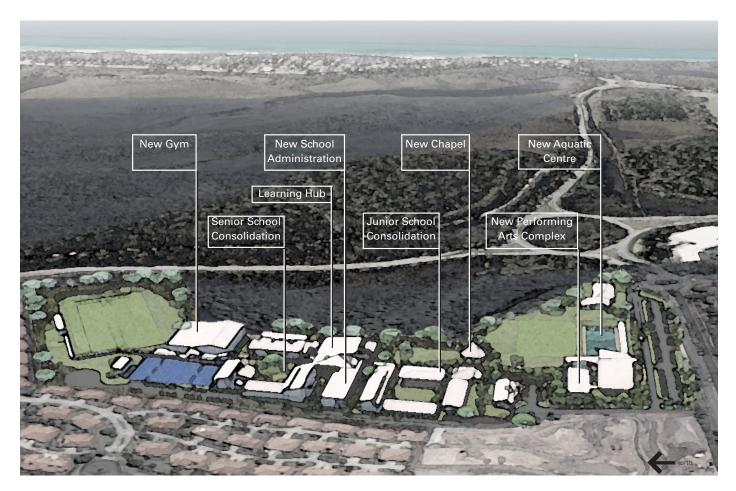
ST ANDREW'S ANGLICAN COLLEGE MASTER PLAN

Sunshine Coast, Queensland

This project originally involved designing a new Learning Hub using an existing master plan for St Andrew's Anglican College – a rapidly-growing school on the Sunshine Coast.

In the early stages of designing the Learning Hub, Wilson Architects and the College identified the need to update the plan.

There were a number of challenges the school needed to overcome through the new master plan.



Perspective view of the master planned site, proposing future interventions.

Working within a tight site

St Andrew's Anglican College is hosted on a long, narrow block of land. On one side of the College sits a retirement village, with a second side bordering a wetland.

With large amounts of development taking place on the site in recent years, Wilson Architects needed to review how the College used their available space.

The main challenge was deciding on the location of the new Learning Hub building. Wilson Architects positioned the new development in the centre of the school – with primary and secondary schools sitting on either side of the Hub.

The result is a place that creates a true gathering point in the middle of the College, and serves the whole school community. The Hub has become a living space where students, both primary and secondary, meet to socialise and study, before, during and after school hours.

Rethinking an unwelcoming entrance

The College's entrance was originally unwelcoming, and held no connection to the remainder of the school from the street. Wilson Architects reconfigured the entry, and the ways people move from the front of the school (where most of the parking is), down to the centre of the school.

The design team steered away from the concept of a typical large straight avenue down the centre of the school, to one of a curved path. The sloping site and straight walkway had previously obscured the view to the wetlands. Using a curved path provided opportunities for views across the wetlands and across to some of the College's future developments.





"Master plans are a living thing – education moves fast, and we need to constantly review and update our thinking to meet our student's needs. Our master plan has been a great success – we're very happy with it."

Mike Keily, Facilities Development Manager, St Andrew's Anglican College

The new Learning Hub, at the centre of the campus, has set up the strategy and sequence for future construction stages.

Q&A

Hamilton Wilson, Managing Director, Wilson Architects



Why is a master plan important?

Schools typically just have one site. There are many regulations that come with building on a school campus, including avoiding excavation into the site, and using demountables (particularly in an urban environment).

The master planning process allows schools to understand the total capacity for their site, and plan their future accordingly.

Master plans provide the benefit of understanding a school's future and how it corresponds with the long term development of the community around it.

What have you found to be a common myth about master plans?

The myth is that master plans just look at physical space. A strong master plan should understand what the key drivers of the school are, and take them into consideration.

For some schools, it may be accommodating student and learning support into spaces that are more accessible, and not stigmatised. This creates a simpler and better service model –

the support comes to the student; the student doesn't have to seek out the support.

It's important to consider how social learning space (whether indoors or outdoors) can be better integrated into a network of existing space, to enable students to extend their learning in the easiest way.

A master plan should consider the school's whole ecology, and if successful, can positively influence the behaviour of staff and students.

Why is it important for schools to keep revisiting their master plans?

With increasing population and technology innovations, it's only natural that the needs of students and educators will continue to evolve.

Many schools have master plans but they don't use them. From my experience, this inevitably leads to missed opportunities, because master plans contain valuable information that make school environments much richer. It's important to keep a master plan aligned with your Strategic Action Plan – your master plan should be updated alongside this.

