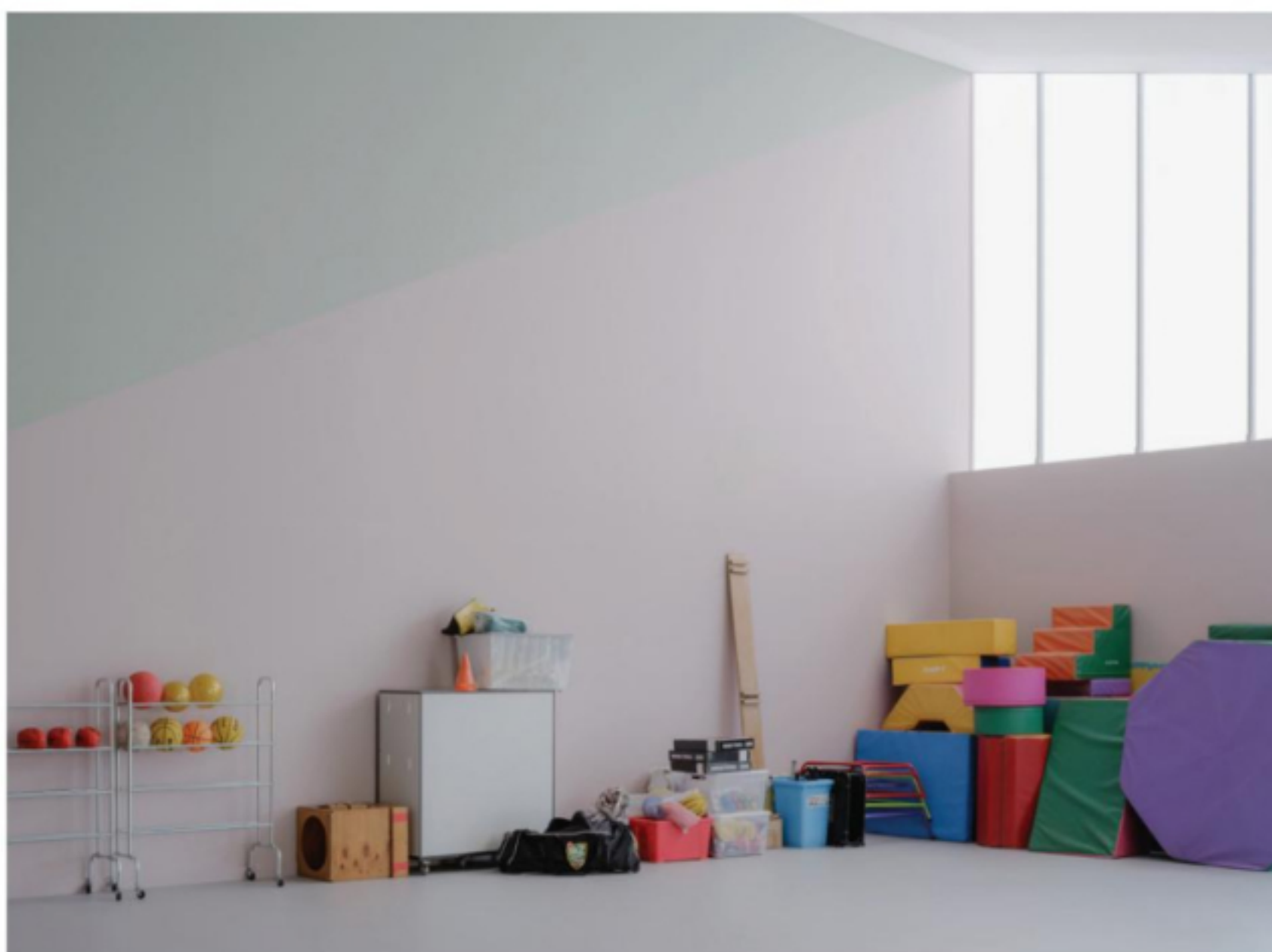

Building calm

Words by Timothy Moore

In schools across the state, students weave together memories like the colourful threads of a tapestry – tuckshop lunches shared with friends, the thrill of schoolyard games, and the quiet triumph of mastering a new skill. As the Victorian state government invests billions into revitalising educational spaces through its school funding programs managed by the Victorian School Building Authority (VSBA), architects are designing environments to foster learning and connection, setting the stage for new memories to be made.

Alongside the rollout of infrastructure, there is a concerted effort from educational institutions to create more inclusive environments that accommodate different neurological profiles, such as autism, ADHD, dyslexia, and more. Schools are increasingly implementing strategies to support neurodiverse students, focusing on individualised learning plans, sensory-friendly spaces, and trauma-informed practices.

Below
Hampden Specialist School by Project 12 Architecture. Photo by Hamish McIntosh



In recent years, there has also been growing recognition of the need for design practices to cater to neurodivergent users. This includes several design guidelines that have emerged in the last decade to respond to this, such as: *Autism ASPECTSS* (2015), *Design for the mind – Neurodiversity and the built environment – Guide* (2022), and *Design across the spectrum: play spaces* (2016). The National Construction Code and Australian Standards are also under review to see how regulatory frameworks can accommodate neurodivergence. However, architectural precedents are lacking that translate the universal and broad strategies of guidelines to its contextual relevance, or test and validate these strategies, particularly in educational environments. Recent educational projects by Project 12 Architecture however provide much needed examples that exemplify how to effectively address sensory stimulation in these environments.

In the burgeoning outer northern suburb of Broadmeadows on Wurundjeri Woi-wurrung Country, Meadows Primary School enrolments have continued to grow. To respond to this need, the school engaged Project 12 Architecture (along with Simon Ellis Landscape Architects) to design a new 10-classroom building capable of accommodating 200 additional students.

The design brief was deeply informed by the context of the staff and previous experiences within the school. The existing open-plan learning spaces, consisting of four classrooms within a single large area, facilitated concurrent activities and flexible configurations. However, many students—over seventy percent of whom had English as an additional language—struggled with auditory clarity and were easily distracted. The resulting sensory overload prompted the school to install makeshift acoustic solutions, such as gym mats and partitions, which ultimately proved ineffective.

The new building responds to this experience by prioritising security and comfort through physically enclosed classrooms. This is spatialised on a slither of the south-west corner of the site with a rational plan where the room schedule



(ten classrooms, two small-group seminar rooms, staff work areas, student and staff amenities) is arranged along a generous central corridor. Each classroom is designed with thoughtful aspects that allow for natural light, while views are intentionally offset from student desks to minimise distractions and enhance focus.

A key move of Project 12 was to create two seminar rooms that subtly double as sensory rooms even though they lack the typical enhancements - textured surfaces, adjustable LED lighting or other visual stimuli. Director Aimee Goodwin from Project 12 indicates it was important to provide a place for students to have timeout in a way that was not obvious in putting “students on show”. These spaces are significant as some members of the school may have been exposed to trauma. (Meadows Primary School utilises the School Wide Positive Behaviour Support (SWPBS) framework and the Berry Street Education Model (BSEM) to implement trauma-informed practices.)

Project 12 arranges the new classrooms under one polycarbonate gable roof. The form continues the rational and logical expression demanded by the school. The gable roof indicates its suburban context while three clear recessed doorways signify entry. Clear wayfinding continues in the interior along the central spine: colour is assigned to lockerbays, and are extended joyfully to the clerestory. Playful hopping stones (circular stickers adhered to the carpet) appear part way down the corridor as an instrument to regulate overly active students.

The dampening of sensory overload in the Project 12 addition is reflected in an improvement in NAPLAN results of the school. The quality of the work was also recognised with Meadows Primary School receiving a 2023 Victorian Architecture Awards Commendation for Educational Architecture.

Calmness is also a quality continued with Hampden Specialist School, located three hours south-west of Melbourne in Terang on Djargurd Wurrong Country. The brief for Project 12 was to provide a new building for Hampden’s P-5 (of 19 students) along with a library and classroom building for the junior students for Terang College on the Senior Campus site. The consolidation of Hampden Specialist School and Terang Junior School onto the Senior College campus emerged from the downsizing of enrolments at Terang from 600 to under 200. This co-location means Hampden now has access to a wide range of programs and curriculum offered by the college.

The new building features a layout that places four classrooms along a central corridor, with a multipurpose room and an administrative wing at either end. At the heart of the corridor is a life-skills space, which includes a dining room where children can prepare lunch before going outside to play. This space not only fosters social interaction but also engages the sense of olfaction, as the aromas of fresh food create a stimulating environment. Connection to outdoors is also used as a stimuli with each classroom providing access to

the outside that can help moderate behaviour, including through ventilation.

Project 12’s acumen with educational buildings is further demonstrated through a new competition-grade gymnasium for Cowes Primary School on Bunurong Country, designed to meet both the school’s educational goals and the needs of the broader Phillip Island community.

The site was blessed with both a swimming pool and a swathe of remnant bushland gifted to the school over 30 years ago. The new building, which contains a competition grade basketball court, music room, toilets and change rooms, sits between the pool and the bushland to form a sports precinct. The new gym does not compete with the natural setting: the lower part of the building is framed as a black band that sets up a McCubbin-esque bushland view. When gym doors are open, eucalyptus and tea tree scent waft in on the breeze - improving air quality, but also enhancing the mood, and creating a more inviting atmosphere. The building also provided an opportunity to include an outdoor amphitheatre and external teaching space that connects seamlessly with the surrounding native bushland. This renewed attention to nature now sees students now take the long way back to the classroom through the sanctuary.

The additions to Meadows Primary School, Hampden Specialist School and Cowes Primary School demonstrate an astute command of sensory responsiveness. Project 12 leverages rational spatial planning to combat the constant sensory overload of the school environment to bring a sense of calm to the busy school environment. Olfaction also is considered as a design element, which can otherwise get regulated as secondary. This reflects a deep understanding of Project 12 in the role architecture plays in shaping positive educational outcomes. ■

Timothy Moore RAIA is a co-director at Sibling Architecture, associate dean (engagement) at Monash Art, Design and Architecture, and the curator of contemporary design and architecture at the National Gallery of Victoria. Timothy has worked at architecture offices in Melbourne, Amsterdam and Berlin, and as an editor for influential magazines, *Volume*, *Architecture Australia*, *Memo Review Architecture* and *Future West* (Australian urbanism). Timothy is widely published in architectural magazines and journals and speaks at architecture conferences and in the media.

Left
The new gymnasium at Cowes Primary School invites in the sounds and scents of the adjacent bushland. Photos by Hamish McIntosh