

01 – Education Specialist Input Report

01



Educational Model FOR Waitara Public School

FEBRUARY 2018



PLACES CREATED FOR LEARNING

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WAITARA PUBLIC SCHOOL: EDUCATIONAL MODEL

GHDWOODHEAD , SYDNEY , NSW

02.2018

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The intention of this document is to provide the foundation for the design of the new Waitara Public School.

INTRODUCTION

The primary goal of the Project Education Model for Waitara Public School is to communicate a mutual and consistent vision for the design of this new K-6 learning community. To achieve a document that reflects the vision for this new building, typically, the concepts from the project educational principles and interactive workshops with key stakeholders for the school are evaluated. From the findings, themes emerge, i.e. open, integrated, flexible, and welcoming to name a few. These themes have are translated to understandable and recognizable features for the interior spatial design of the school building. Hence, the intention of this document is describe the vision and inform the interior spatial design of the buildings.

In February of 2017, Places Created for Learning (PCL) was engaged by GHDWoodhead (GHD) to prepare the Project Education Model for Waitara Public School. WPS chose not to have the interactive workshops. On February 6, 2018, PCL received drawings from GHD and was asked to prepare and complete the project educational model.

It is notable that WPS achieved a design that they believe will work for their teachers. This document only reflects what we understand from the project educational principles and perceive from the floor plans developed by the school's building committee with the NSW DOE. Based on our understandings of the principles and floor plans, we offer a general overview for the architecture of the interior spaces. Be aware that our goal is to provide a vision documents for WPS that is not based on normative mindsets, but rather is drawn from our research and work on the spatial design of learning environments (Mathews & Lippman, 2016) along with our experience teaching in alternative learning environments (Lippman, 2010).

The Project Educational
Principles

Future-Focused
Learning Environment

THE PROJECT EDUCATIONAL PRINCIPLES

- 1. Future Focused Flexible Learning Spaces:** Waitara Public School provides safe accessible, connected and flexible learning spaces that are centred on *future-focused* learning and are adaptable for the changing needs of learners and learning.
 - Promote spaces that encourage learning for students and teachers through collaboration, social interaction, active and creative investigation.
 - Provide flexible spaces that accommodate different size groups to engage in a range of activities that encourage learner self-management and self direction.
 - Support a full range of teaching strategies from direct explicit instruction to facilitation of inquiry and authentic project and problem based learning.
 - Develop a thoughtful design that reduces the impact of urban noise and congestion with a focus on safety.
 - Provide all weather access between teaching and learning spaces .
- 2. Culture of Welcome, Inclusion, Belonging:** Waitara Public School is a community that creates and celebrates a culture of welcome, inclusion and belonging that reflects and respects diversity.
 - Provide contemporary facilities that enable and enhance community partnerships and link services in supporting our local community.
 - Plan for the potential for the school to grow and expand whilst maintaining open green space.
 - Provide school facilities that invite the local community to share and interact with the school to build a strong presence and connection with the community.
- 3. Aesthetically Pleasing:** Waitara Public School seeks to create an environmentally, aesthetically pleasing flexible space that embraces historical and environmental challenges while maintaining and developing community focus.
 - Provide imaginative, safe and colourful student friendly environments that integrate and maximize indoor and outdoor learning space.
 - Maximize the openness of the site for seamless learning and teaching between inside and outside learning spaces.
 - Maximize playground space to allow the school to influence exercise and play while promoting healthy living and accommodating age appropriate areas.
 - Provide aesthetically pleasing spaces with a new approach to fit out and furnishings that encourage, creative and flexible learning .

The Educational Principles for Waitara Public School developed by the schools building committee with the Project Reference Group (PRG) based upon DoE guidelines.

THE PROJECT EDUCATIONAL PRINCIPLES (CONTINUED)

- 4. Diverse Indoor, Outdoor Learning Spaces:** Waitara Public School offers diversity of indoor and outdoor spaces which manifest sustainability while enabling future –focused technological learning environments.
- Enable *future-focused* learning practice by use of online collaborative technology to ensure students can access rich global perspectives and have ability to create for a wide range of audiences. Enable creating a stimulating teaching and learning environment.
 - Create a stimulating teaching and learning environment where spaces support collaborative planning and learning.
 - Employ passive design principles for the comfort of the building users, minimising energy use through winter warming and summer cooling, sun, shade, and ventilation.
 - Connect with School , environmental sustainable programs such as the school gardens .
- 5. Site Aligned Flexible Learning Environments:** Waitara Pubic School offers a flexible learning environment that transitions between indoor and outdoor learning spaces that are aligned with the site and embrace a vision for the future.
- Create spaces that stimulate and support all students including those with special needs to connect succeed and thrive
 - Landscaping hard and soft materials, playing filed for sports, games court and play equipment are key elements of outdoor play areas.
 - Facilitate learning and connectivity anywhere, anytime by providing seamless access to ICT and integration of learning resources throughout the learning spaces.

The Educational Principles for Waitara Public School developed by the schools building committee with the Project Reference Group (PRG) based upon DoE guidelines.

THE PROJECT EDUCATIONAL MODEL

In the field of education, an Educational Model describes shared practices and views of pedagogical theories and/or approaches which guide the teachers and specialists in an academic institution. An educational model is conceived as a group of goals and guidelines that reflect the school's mission, vision and values. Hence, this project education model is a document that provides a conceptual framework for the school committee's vision of their new building. Hence, this is a vision document for the Waitara Public School building. The vision for the design of this new four-story school building is classrooms organized along common areas that support teacher work areas, libraries, and maker spaces. Furthermore, this K-6 building will have 38 classrooms and house approximately 1,140 learners. The approach embraced for the design may be described as *responsive* (Lippman, 2010) to the current needs of the teaching community, and includes qualities associated with 21st Century Learning Environments. These qualities may be described as integrated and flexible.

- Integrated—By including cavity sliding doors between classrooms, teachers may open the doors as needed and connect the classrooms. Teachers may also close the doors so that they may focus on activities specific to their curriculum. Whether the doors are opened or closed, corners, differentiated learning zones, may always be maintained allowing learners to focus on the tasks-at-hand. Hence, Integration isn't just about connection between spaces, but also is about affording spaces where learners can settle into a space and integrate (assimilate and accommodate) information into knowledge.
- Flexible—For WPS, this learning environment provides flexibility in both the social and physical environments; for:
 - The classroom settings are flexible when they afford placemaking and movement between the differentiated settings in the classrooms. In these differentiated settings, learners may move seamlessly between peripheral engagement (seeing what others are doing), guided engagement (being coached by others) to full engagement (where they are working alone resolving an issue.). Hence flexibility may be less about movement of features in the environment and more about reflection and introspection (Lippman, 2010).
 - This building will have a mechanical system that will heat and cool each of the different spaces in the building. For this reason, teachers will have the choice to close classroom doors without disrupting air flow into the common spaces. Furthermore, this building may be described as *future-proofed*; for, if noise from the maker spaces becomes an issue for teaching in the classrooms, WPS may enclose the libraries, maker spaces, and teacher work areas.

Additionally, this new building will be a technology-rich learning environment. Along with the HVAC system, an appropriate Information and communication technology (ICT) system will be provided by NSW DoE for teaching and learning. Another goal of the design will be to create a building that is viewed as part of the larger community. Hence when the school and its associated outdoor play areas are not in use, i.e. the covered outdoor learning area (COLA) and play fields, the anticipation is that the community will utilize these spaces.

Responsive

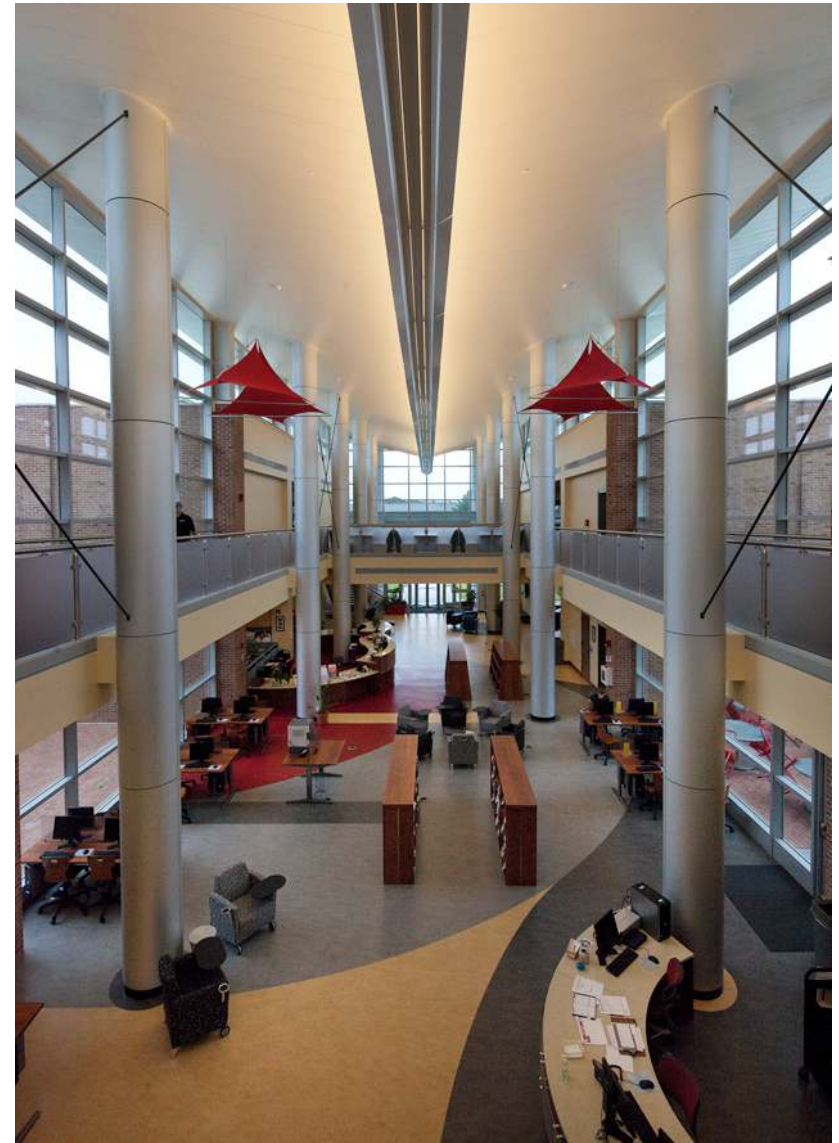
Future-proofed

Technology-rich

BUILDING MODEL

The intention for the building is that it will embody Waitara's Public School's vision, mission and values. This is a building that has been crafted to support the teachers and enable them to mediate learning. Hence, large 80 square meter classrooms have been planned in which learners will be encouraged to develop their formal, informal, and creative skills. To achieve this, the physical environment has been conceived as a series of differentiated spaces arranged around and along common spaces, like the teachers work areas, maker spaces and an amphitheatre between the 3rd and 4th levels. The goal of the spatial design is to provide learning spaces where teachers may actuate learners and mediate their learning. To understand how the building will mediate learning, the subsequent sections will examine the following teaching and learning areas:

- Common Spaces—Library, Amphitheatre Seating and Maker Spaces
- Distinctive Learning Programs—Special Programs, EAL/D and Special Needs;
- Home Bases and Salient features of the Home Bases;
- Teacher Work Areas and Outdoor Play Areas.



COMMON SPACES

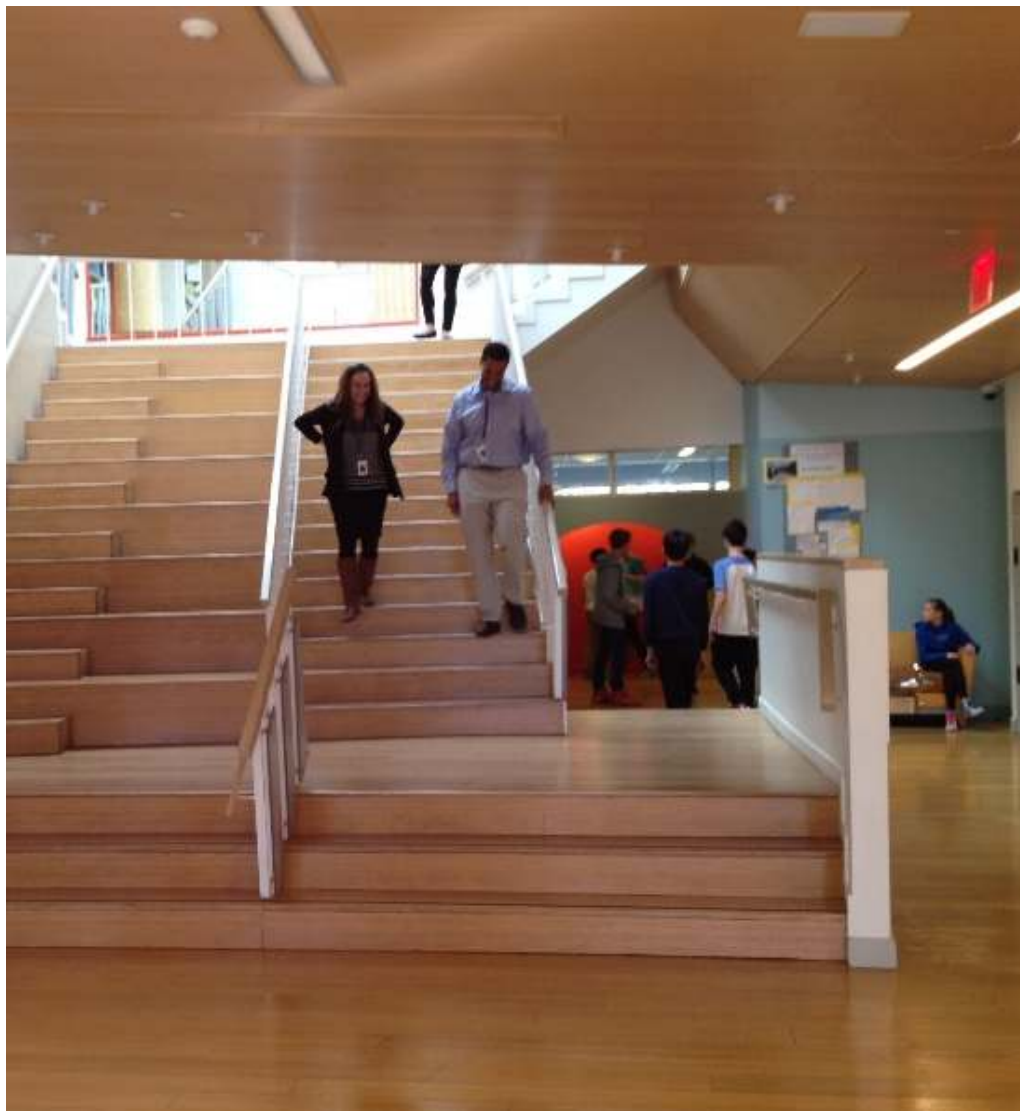
Waitara will have common shared spaces. These include: libraries and maker spaces located throughout the school and an amphitheater seating that connects the 3rd and 4th level of the school.

LIBRARIES: Printed books are still important in the spectrum of learning, but digital technology allows for more mobile, instantaneous fact-finding. As a result, libraries are viewed as part of the learning commons which encourage learning. As such a library area is located on Levels 2-4. Since these spaces are located adjacent to the maker spaces, their purpose in the entire learning spectrum has the potential to evolve from recreational reading to research to production and sharing.

AMPHITHEATER SEATING: This is envisioned as a place where ideas are encouraged to flow between learners. In the physical environment, this complementary space is:

1. essentially an open and tiered piazza in the building;
2. a learning area that 2-3 three classes can meet at any time for a lecture or for streaming a video; and
3. a learning area that connects students peripherally to the interactions of others, but affords them a place where they can become fully engaged in activities.

While this is a place where learners may gather, the essence of this space is how it affords the creation of other complementary learning areas around it and under it. Hence, this space complements the classrooms. Furthermore, the tiered amphitheater seating allows for a natural means for students from different classes to work in the same place. The level changes provide a sense of prospect and refuge, safety, comfort, and personalization. This space is multi-functional. It can be used to gather large groups (not the entire school or all the classes on the 3rd level or 4th levels at any one time), small social groupings, and a place that affords independent work (PEHKA, 2012).



COMMON SPACES (CONT.)

MAKER SPACES: Makers spaces in the new Waitara Public School building are differentiated learning zones that are located adjacent to the Home Bases. The Maker Spaces are intended to support science, art, and design/technology. The reason that science, art and design/technology may take place in a Maker Space is that, generally, these activities share common features. Each requires the following: an area to teach theory; an area where learners can do their practical work / cooperative (and independent) work; storage; a prep area, and a wet area.

Furthermore, the maker space have direct access from the Home Bases. Furthermore, the intention for these spaces is to accommodate whole classes, small social groupings for collaborative work, and independent work. The intention for these settings is to allow students to conduct empirical experiments. Additionally, these spaces, have access to Wi-Fi and have TVs and/or projectors. Lastly, these areas have sinks, adequate storage potentially for iPads, and the assortment of materials and supplies they need for activities and projects.



EDUCATIONAL SUPPORT SPACES

SPECIAL PROGRAMS: Special Program spaces are music, art and drama and language. The vision for these spaces are to have the appropriate and adequate furniture needed to support the different programs. Furthermore, the music room will be near the hall which has a stage, and seating to accommodate performances.

EAL/D & SPECIAL NEEDS: For newly arrived students where English is their second language, WPS will have spaces for EAL/D students. These spaces are associated and adjacent to mainstream classrooms so that students may easily integrate with overall learning community.

In addition, the building affords learning spaces for children with special needs children. The goal is to have these children integrated with the mainstream. Spaces have been provided near the mainstream instructional spaces.

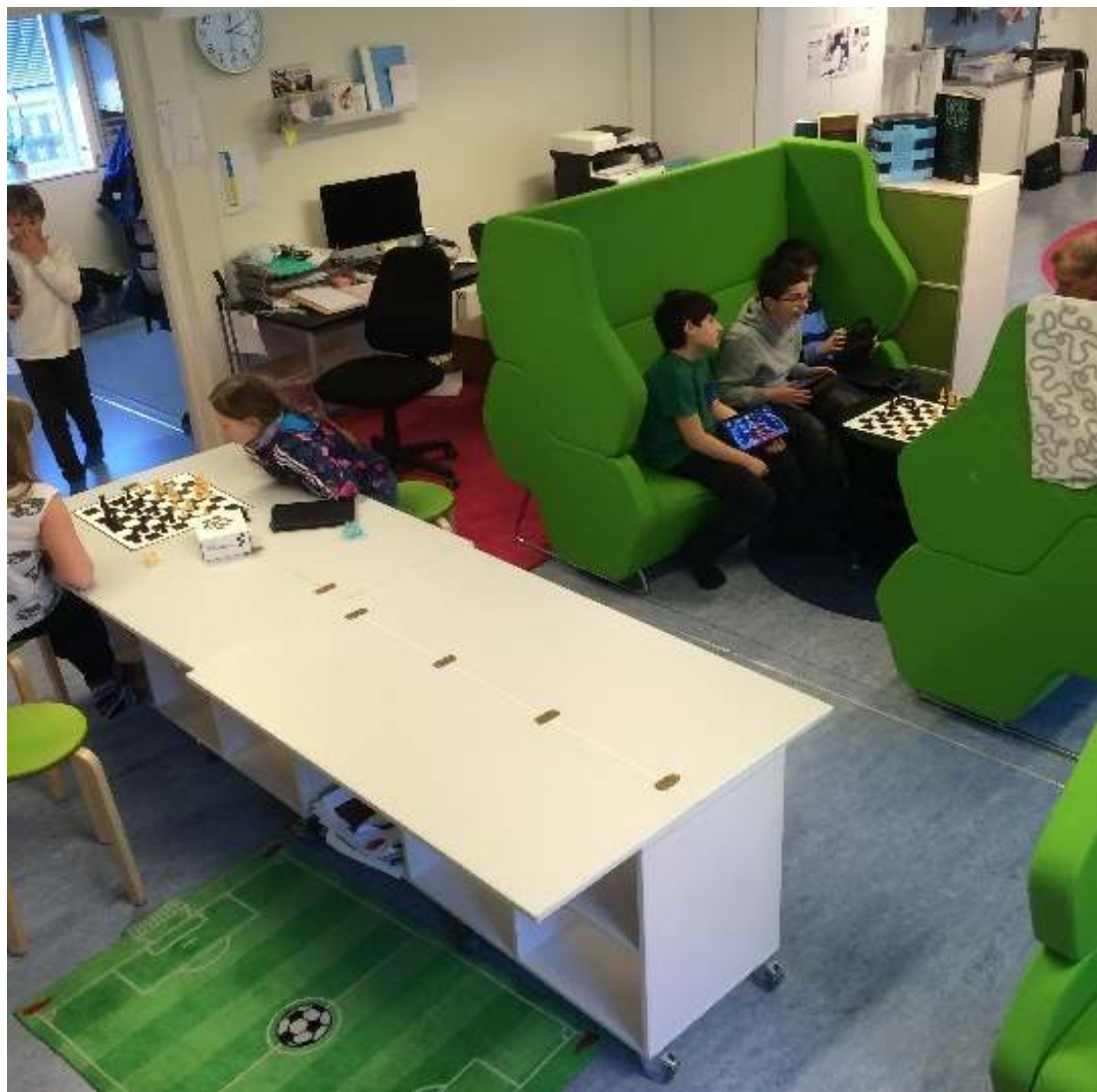


HOME BASES (CLASSROOMS)

The Home Bases (General Learning Areas/Classrooms) are collaborative spaces that support the needs of approximately 30 learners. These places support both didactic and cooperative pedagogies. While learners will work in a variety of ways, the arrangement of the furniture must consider the choreography through the space, specifically the areas in between the differentiated learning zones. The spaces in between offer learners the opportunity to choose how they want to engage (Mathews & Lippman, 2016). They can choose to remain on the periphery or become engaged with others. To accomplish this:

- The rooms will have virtual capabilities, i.e. projectors, LCD screens, dimmers all controllable via tablets.
- Display areas will be provided in the rooms to showcase students' work as well as to showcase specific topics appropriate to the curriculum.
- Classrooms will be located near toilet rooms; store rooms, and other classrooms.
- Each room will have visual access to the outdoors

Please Note: In one of the corners for a number of the classrooms, a group area has been planned. This area is differentiated with a folding glass wall and sliding glass door.



SALIENT FEATURES OF THE HOME BASE

SLIDING CAVITY DOORS: Cavity sliding doors are between Home Bases. Cavity sliders, when closed, can isolate noise. When they are open they connect spaces (Lippman, 2013a & 2013b). Most importantly, these features, when open or closed, maintain corners in the Home Bases.

GLAZING: Along exterior perimeter walls and interior partitions connect learners to the activities and actions that occur beyond their current tasks-at-hand. Provide glazing proportional to wall space need for displays, White boards (installed vertically), and TV screens.

FOCAL POINTS OF THE ROOM: We recommend providing more than one focal points (vertical writing surfaces) in the rooms to share cooperative group work and/or additional TVs for cooperative group work.



TEACHER WORK AREAS

These are formal spaces for teachers located throughout the building, where staff can work, plan, and work collaboratively. These spaces may also accommodate teachers who do not have classrooms and work intermittently at the school. Furthermore, these are spaces where:

- Teachers reflect on the days activities
- Teachers can engage in a quiet place with others and work on the project-at-hand (Alterator, 2016).
- Teachers can meet with parents, students as well as other staff members.



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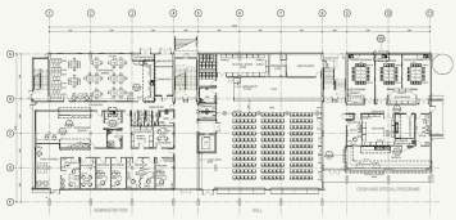
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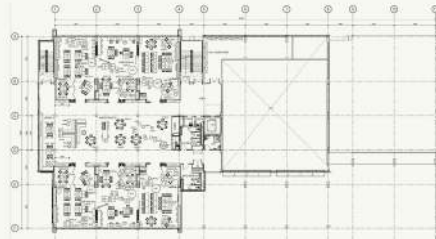
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WAITARA PUBLIC SCHOOL

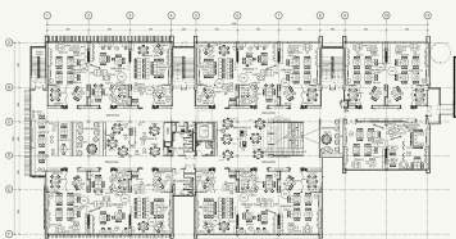
APPENDICES—SCHOOL BUILDING



Level 1



Level 2



Level 3



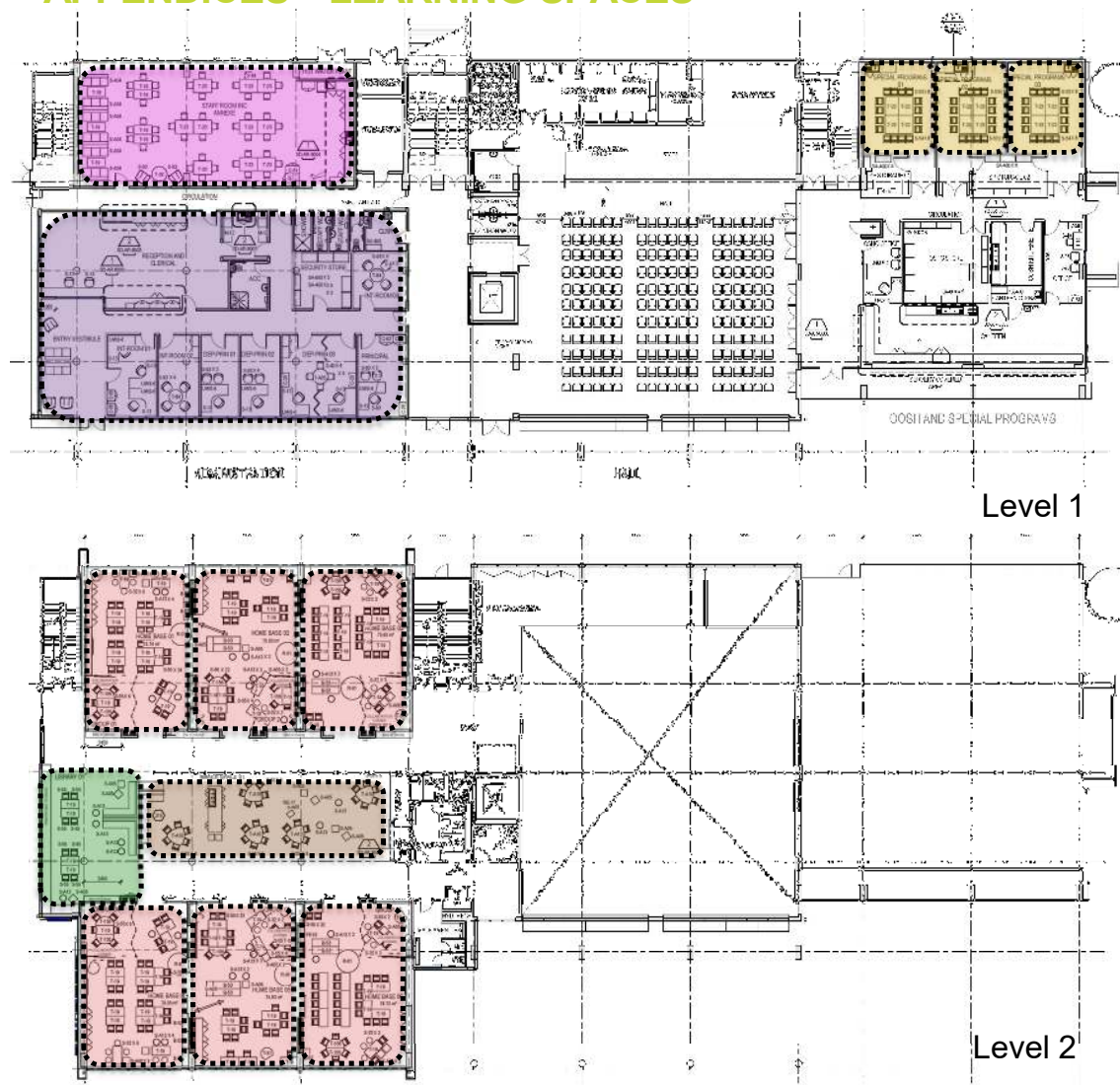
Level 4

Conceptual Framework of the WPS Building

The new 4 story Waitara Public School building:

- Supports flexible and integrated classroom settings which may be re-arranged as needed to support the actions, motivations, goals of the learners.
- Encourages a pedagogical approach that enables learners to move from being peripherally engaged to being fully engaged in the tasks-at-hand.
- Provides differentiated settings that is intended to afford opportunities for the diverse ways in which people acquire knowledge.

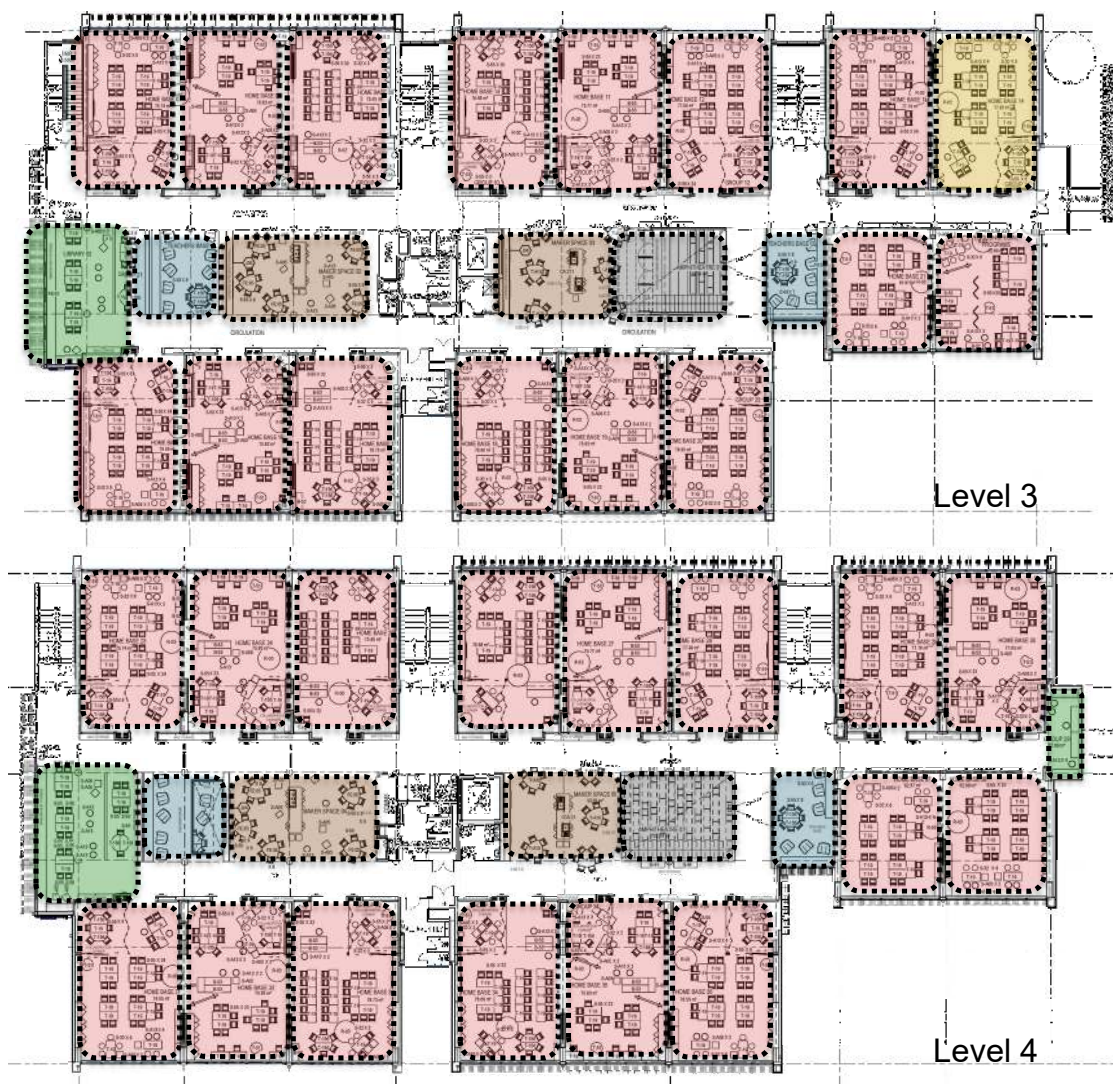
APPENDICES—LEARNING SPACES



Legend:

-  Home Bases / classrooms are collaborative learning environments. These spaces support both didactic teaching, group work and independent learning (Lippman, 2010).
-  Maker Spaces are defined learning areas where learners develop practical skills in design and technology, art, and science.
-  Teacher work areas
-  Special Programs might accommodate music and drama. These spaces must have a variety of furniture types.
-  Administration
-  Staff Room is a place where staff may work, plan, and work collaboratively. This setting may also be a place, staff may eat, socialize, and rest.
-  Library / Group Area

APPENDICES—LEARNING SPACES



Legend:



Home Bases / classrooms are collaborative learning environments. These spaces support both didactic teaching, group work and independent learning (Lippman, 2010).



Maker Spaces are defined learning areas where learners develop practical skills in design and technology, art, and science.



Teacher work areas



Special Programs might accommodate music and drama. These spaces must have a variety of furniture types. On this floor this is a language laboratory.



Administration



Staff Room is a place where staff may work, plan, and work collaboratively. This setting may also be a place, staff may eat, socialize, and rest.



Library / Group Area



Amphitheatre Seating

APPENDICES—CLASSROOMS



Legend:

-  Sliding cavity doors between Homebases afford teachers to team-teach as well as work indecently as needed.
-  Joinery (built-in) will provide the needed to storage for the Homebases.
-  Display walls include TV screens, projecting screen, pin-up boards, and vertical writing surfaces. While each home base may have a formal focal point/display area for the entire class to review particulate concepts. This design offers additional focal points so that group work and independent work may be displayed to the class.
-  Potential group room and activity setting. This area is differentiated with a folding glass door and a sliding glass door. How practical this space is for teaching and learning is uncertain. Additionally, how this space functions daily for teaching and learning is unclear.
-  Potential locations for Activity Settings which are differentiated learning zones in the Home Bases that are defined by the specific props associated with the zone. These setting support small social groupings (4 -6 students) to work cooperatively.



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