



Educational Model **FOR** Epping Public School

AUGUST 2017



PLACES CREATED FOR LEARNING

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EPHING PUBLIC SCHOOL: EDUCATIONAL MODEL
GHDWOODHEAD, SYDNEY, NSW
08.2017

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The purpose of this document is to provide the foundation for the design of the new Epping Public School.

INTRODUCTION

The goals of this document is three-fold. This document:

1. Presents and examines the ideas from the educational principles developed by Epping Public School ;
2. Describes and evaluates the concepts of the educational model, i.e. innovative, flexible, holistic, and integrated to name a few, for this new building; and, most importantly,
3. Extends the educational model and translates its concepts to understandable and recognizable features in the spatial design.

Hence, this document will describe how the concepts from the educational principles and educational model are manifested within the spatial design of this new building. The outcome for Epping Public School will be a new public school that reflects a holistic approach to teaching and learning. Furthermore, this document will affords a framework for planning and designing this innovative learning environment.

Lastly, this document will connect the research from environmental, educational, and developmental psychology with school design. By making these connections, this document will provide insight for planning an innovative building that will be an innovative, holistic, and flexible learning environment.

- Holistic
- Flexible
- Defined



SUMMARY OF MEETINGS: This report provides a summary of outputs from a series of Design Workshops held at the offices of GHD Woodhead, the Dept. of Education, and Epping Public School.

Date	Venue	Purpose	Key Attendees
10/02/2017	GHD Woodhead	Introduction to New Learning – a workshop to introduce our team, and outline our approach	Peter Lippman Steve Mellor Mike Warren Sait Buzgan Paul Thatcher Gerrie Lykourezos John Ford
03/04/2017	DoE	EFSG meeting to discuss internal layouts and design intent	Lyndall Smith Angus Keller Steve Mellor Sait Buzgan
24/03/2017	GHD Woodhead	Commencement of internal layouts and new learning models to validate spatial allowances	Peter Lippman Paul thatcher Sait Buzgan
12/05/2017	GHD Woodhead	Interrogate response from Epping PS at PRG #9, and develop further floor plan refinements for incorporation into Concept Design	Peter Lippman Paul thatcher Sait Buzgan Mike Warren
24/05/2017	Epping PS	New Learning workshop to discuss Epping PS teaching learning model and validate detail internal layouts.	Peter Lippman Paul Thatcher Gerrie Lykourezos John Ford

From these meetings with DoE and Epping Public School, GHD and PCL have developed an educational model and a design for a modern, flexible, and focused learning environment.

EDUCATIONAL PRINCIPLES

1. **Innovative, Sustainable Fostering contemporary Pedagogy:** Create an innovative and sustainable school that fosters contemporary pedagogy. Facilitates easy movement between indoor and outdoor spaces . Provides the latest ICT resources and ICT connection available at the time to enable the use of on line collaborative technology to ensure students can access rich stimulus and global perspectives Incorporate sustainable initiatives such as design principles for building comfort. LED lighting, solar and water capture for reuse. Ensure there is space provided for collaboration of teachers for team planning and storage of resources.
2. **Flexible, adaptable and responsive to Students' Need:** Develop flexible learning spaces that are adaptable for changing needs of students and learning models. Provide flexible spaces that: are: are: accessible for use between rooms; allow for different sized groups to engage in different activities; can be adapted to suit different teaching and learning opportunities; allow for different furniture configuration; and stimulate and support all students, including those with special needs to connect, succeed and thrive.
3. **EAL/D Student Learning Spaces:** Incorporate learning spaces for our EAL/D staff and students. Our school has over 80% EAL/D students and many are new arrivals. Ensure appropriate spaces for explicit teaching on a one-to-one and small group basis.
4. **Maximize Playground Space:** Many of our children will live in apartments. And their culture does not foster out door play. Maximize playground space to allow the school, as major influence on exercise and play, to promote healthy play.
5. **Community Focus with Holistic Learning Environment:** Create a school that is community focused with a holistic learning environment. Recognition of the main building to the community and its link to the past. Ensure a welcoming entrance to the community. Develop a site that allows for community presence, but has security measures in place. Provide disables access throughout the school including the main entrance.

Innovative,

Flexible,

Appropriate, and

Holistic learning
environments

Along with healthy play

EDUCATIONAL MODEL

The new school for Epping Public School will be a K-6 comprehensive school strongly focused on innovative ways for teaching and learning. It will be a places that fosters independent, critical and creative thinkers who will understand the worlds in which they live with a desire to have a positive impact on it.

Students will learn collaboratively as a member of this Learning Neighbourhood. This learning neighbourhood is a three-story building with 23 Home Bases which will house approximately 690 learners aged from Kindergarten to year 6. To provide a scale suitable for the learners, this neighbourhood is composed of 5 learning nodes. One node is located on the Ground Floor, while two nodes are located on the First and Second Floors respectively. Each node is made up of 4 or 5 Home Bases that will share the following learning areas: Maker Spaces, Group Rooms, and a variety of semi-enclosed Complementary Spaces.

The approach embraced for the design may be described as *responsive* (Lippman, 2010); for, the learning neighbourhood is planned with a variety of integrated, yet defined learning zones. In the Home Bases these zones are activity settings, whereas outside the Home Bases, they are complementary learning zones. Activity settings and complementary spaces mediate and actuate the learning process (Lippman, 2016), since these are learning zones organized to stabilize and ground the learner. These settings provide defined areas in which learners explore, negotiate, and share concepts with one another (Lippman, 2010). Hence, these settings are learner-centered; for, each student has the opportunity to become fully engaged in activities in ways that is appropriate for how s/he learns.

The Educational Model has been developed by GHD, TSA, PCL along with Epping Public School.



EDUCATIONAL MODEL FOR EPPING PUBLIC SCHOOL—CONTINUED

Additionally, this school will be a personalized learning neighbourhood—a precinct that ensures that every child progresses at their own pace. As all learners, teachers and students alike, are unique, there will be a variety of spaces in the new building and in the outdoor play areas. These spaces are defined and unique to one another, yet must be understood as integrated and flexible. Each learning zone, which may be understood as the physical embodiment of Vygotsky's the zone of proximal development (1987), are spaces that are responsive to learners as they work individually, in pairs, in small social groupings and in large groups. Extending Moore's research that providing defined areas affords safety and comfort so that learners become focused, fully engaged, and work through their tasks-at-hand (1979/1996; 1986). Lastly, these different learning zones are integral to Epping's EAL/D program where learners may work with another student and teacher to develop their proficiency in English.

These learning zones have been purposefully planned to enhance, engage and enable learners, the learning and the things to be learned. Furthermore, these zones provide flexibility; for, learners may choose how, where and with whom they wish to work; for, within this student-centred learning environment, flexibility is about choice. The affordances of choice involves sense of control. Control provides learners with determining which learning zones afford safety and comfortable so that they might become fully engaged in their tasks-at-hand. Knowing that learners acquire knowledge in a variety of ways, these spaces have been purposefully, thoughtfully and responsibly planned to support independent work, cooperative groups, and didactic teaching. To achieve this, each space has been planned with the appropriate resources and technology. Lastly, this learning neighbourhood will be technology-rich and allow students to extend their learning beyond the boundaries of the school building. Students will have direct access to practical and specialist learning spaces including maker spaces.

Epping Public School will be a new and modern structure along with an aesthetic that is not only pleasing, but most importantly, will inspire students to become lifelong learners. While the design will inspire, it will also be respectful of and embrace connections with the community outside of the school. The synergy of these attributes will afford a true hub for the learning community and the larger community where students, teachers, parents, and the local community members can experience and enjoy.

Zone of Proximal
Development

Activity Settings

Complementary
Spaces

TRANSLATING THE EDUCATIONAL PRINCIPLES TO THE SPATIAL DESIGN

EDUCATIONAL PRINCIPLE 1: Innovative, Sustainable Fostering contemporary Pedagogy: Create an innovative and sustainable school that fosters contemporary pedagogy. Facilitates easy movement between indoor and outdoor spaces . Provides the latest ICT resources and ICT connection available at the time to enable the use of on-line collaborative technology to ensure students can access, rich stimulus and global perspectives Incorporate sustainable initiatives such as design principles for building comfort. LED lighting, solar and water capture for reuse. Ensure there is space provided for collaboration of teachers for team planning and storage of resources.

The Spatial Design Solution for the Educational Model: Two of the goals for this project will be to create a technology-rich and a sustainable environment that supports the entire learning community. The technology will be responsibly and thoughtfully integrated into the spatial design. Home Bases, Group Rooms, Maker Spaces, Library, activity areas adjacent to the Home Bases, and the Amphitheatre seating, the nexus of the building, are intended to have the appropriate technology and access to Wi-Fi to support the diverse activities that will take place, i.e. working in small groups researching and building projects. Along with the ICT, vertical white boards will be placed in these spaces so that learners can display their work. The intention of the white boards is to encourage collaboration for learners and teachers. For this project the architectural design will provide sustainable solution that will not be fragmented, but rather, will balance the social well-being of Epping's learning community, equitably with green design objectives. These holistic objectives recognizes interrelationship of the learner and the learning community with the larger community beyond the boundaries of the school building. Furthermore the implications of the these objectives for the design are intended to reduce environmental impact. This will result from identifying which products and materials are most durable, recyclable, use as little embodied energy as possible, cost effective, life-cycle analysis, and most appropriate for this specific learning environment.

Technology-Rich

Integrated

Holistic



TRANSLATING THE EDUCATIONAL PRINCIPLES TO THE SPATIAL DESIGN

EDUCATIONAL PRINCIPLE 2:

Flexible, adaptable and responsive to Students' Need: Develop flexible learning spaces that are adaptable for changing needs of students and learning models. Provide flexible spaces that: are accessible for use between rooms; allow for different sized groups to engage in different activities; can be adapted to suit different teaching and learning opportunities; allow for different furniture configuration; and stimulate and support all students, including those with special needs to connect, succeed and thrive.

The Spatial Design Solution for the Educational Model: Flexibility has been conceived as: (1) having choice with where and with whom to work in the Home Base and group areas; (2) choice of where and how to teach in the spaces; and (3) the ability to re-configure the furniture in the spaces to support group and independent work. Learning spaces have been designed to support large group, small group and independent learners. While these areas, in plan, may be viewed as separate features, these learning zones extend, connect, and optimize learning opportunities. The different learning spaces complement the activities that originate in the Home bases. These complementary spaces include: nooks, niches, group rooms, and maker spaces. Hence, students have choice outside their Homebase and in their Home Bases, which have been planned with activity settings, (different learning zones with different furniture) to support the variety of ways that they work to acquire knowledge. For teachers, the Home Bases have sliding cavity doors between spaces so that they can choose to work independently or collaboratively, team-teaching. Given that there is moveable furniture teachers and learners are empowered to organize spaces to support their transactions. Lastly, this learning environment allows for personalization, areas where learners may learn self-awareness from showcasing what they have accomplished, social-awareness from their engagements with others and spatial awareness from being situated in their physical environments—inside and outside the confines of the building. From these explorations, learners acquire the skills to know which aspects of the spatial design best supports them and their specific tasks. In addition to providing Universal access ramps and toilets, the physical environment has been designed to allow students to come together. As students work together, collaboratively and communicate / share they get to know one another, which affords a community of inclusion (Lippman, 2010).

Choice

Reconfiguration

Personalization



TRANSLATING THE EDUCATIONAL PRINCIPLES TO THE SPATIAL DESIGN

EDUCATIONAL PRINCIPLE 3:

EAL/D Student Learning Spaces: Incorporate learning spaces for our EAL/D staff and students. Our school has over 80% EAL/D students and many are new arrivals. Ensure appropriate spaces for explicit teaching on a one-to-one and small group basis.

The Spatial Design Solution for the Educational Model: As trends in pedagogy continue to evolve, the future of how learning environments will be designed is still unclear. Nonetheless, Home Bases/classrooms are not expendable (Benande, 2016). Hence, the design approach taken was to create a place that connects people and learning zones visually, virtually, and physically. Hence a variety of spaces for teaching and learning have been crafted not only to support EAL/D Students, but also the entire learning community. Whereas classrooms are conceived with activity settings, the spaces outside the Home Bases are viewed as complementary. These complementary spaces include enclosed group rooms and semi-enclosed spaces nooks, niches, and nodes where smaller social grouping of students can meet with teachers in small groups or independently to work through the tasks-at-hand. By creating these purposefully designed spaces, teachers and learners have a choice in which spaces to work. In addition, these spaces provide a sense of prospect and refuge where learners can focus on specific information. Lastly, each space will include the appropriate resources for learning, i.e. access to Wi-Fi, vertical writing surfaces and furniture. While viewed as separate features, these defined learning zones will provide safe places where learners may not only become fully engaged in the tasks-at-hand/explore, but also afford them peripheral engagement/visual connection to others, and encourage guided engagement/to move between spaces to share with others.



Complementary
Spaces

Purposefully Designed

Engagement

TRANSLATING THE EDUCATIONAL PRINCIPLES TO THE SPATIAL DESIGN

EDUCATIONAL PRINCIPLE 4:

Maximize Playground Space: Many of our children will live in apartments. And their culture does not foster out door play. Maximize playground space to allow the school, as major influence on exercise and play, to promote healthy play.

The Spatial Design Solution for the Educational Model: This modern and *future-focused* learning environment is also both functional and practical. Grounded in Practice Theory (Lippman, 2010), where both the building and learners are understood as active, this building will provide outdoor play areas that encourage the development of the learners sensory and motor skills as well as their cognitive and social / emotional development. Like the interior spaces, the outdoor learning area will be open, integrated and flexible.

- **Open**—Open is about seeing the activities that are taking place. The outdoor spaces will be designed with a variety of complementary spaces that will connect students with one another. For GHD and PCL, the spatial design will provide good site lines between and into other spaces.
- **Integrated**—Integrated spaces encourage students to have access to a variety of different play areas (i.e. climbing, running, and building to name a few) which provide them with choices of where and with whom to play. These spaces are intended to support creative play and formal play, but also provide visual connections and allow movement between areas. Lastly, these spaces will afford learners the choice to settle into a space and integrate (assimilate and accommodate) information into knowledge.
- **Flexible**—Places which are flexible are adaptable, agile and reflexive. These are places that may be arranged to support specific activities, but more importantly, these are spaces that afford movement between the different complementary settings. By affording movement, learners can 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 allowing the movement of learners through the different spaces (Lippman, 2010).



Open

Integrated

Flexible

TRANSLATING THE EDUCATIONAL PRINCIPLES TO THE SPATIAL DESIGN

EDUCATIONAL PRINCIPLE 5:

Community Focus with Holistic Learning Environment: Create a school that is community focused with a holistic learning environment. Recognition of the main building to the community and its link to the past. Ensure a welcoming entrance to the community. Develop a site that allows for community presence, but has security measures in place. Provide disabled access throughout the school including the main entrance.

The Spatial Design Solution for the Educational Model: The new building will not only be welcoming and a stable presence in the community, but most importantly, will be a beacon to the community—a symbol that with an education and hard work anything can be achieved. This notion of achievement will also be forever present throughout the facility. Hence, this building will be holistic, a place that is aesthetically pleasing and respectful to the community form the outside, and where respect for learning is forever present throughout the interiors of the building. For GHD and PCL, this building is not separate from the larger community, but rather is an essential a part of it—an extension of the larger community. When the school and it's associated outdoor play areas are not in use, i.e. the COLA and play fields, the anticipation is that the community will utilize these spaces. Furthermore, the outdoor learning areas will be designed to afford the development of the children's social/emotional and cognitive skills as they develop their motor skills playing in these spaces. The building has been designed so that students may view the outdoor spaces and the community beyond. Thus, staff and learners, as they move through the building, will in all ways be connected to their the larger community.

Symbol

Respectful

Shared



BUILDING VISION

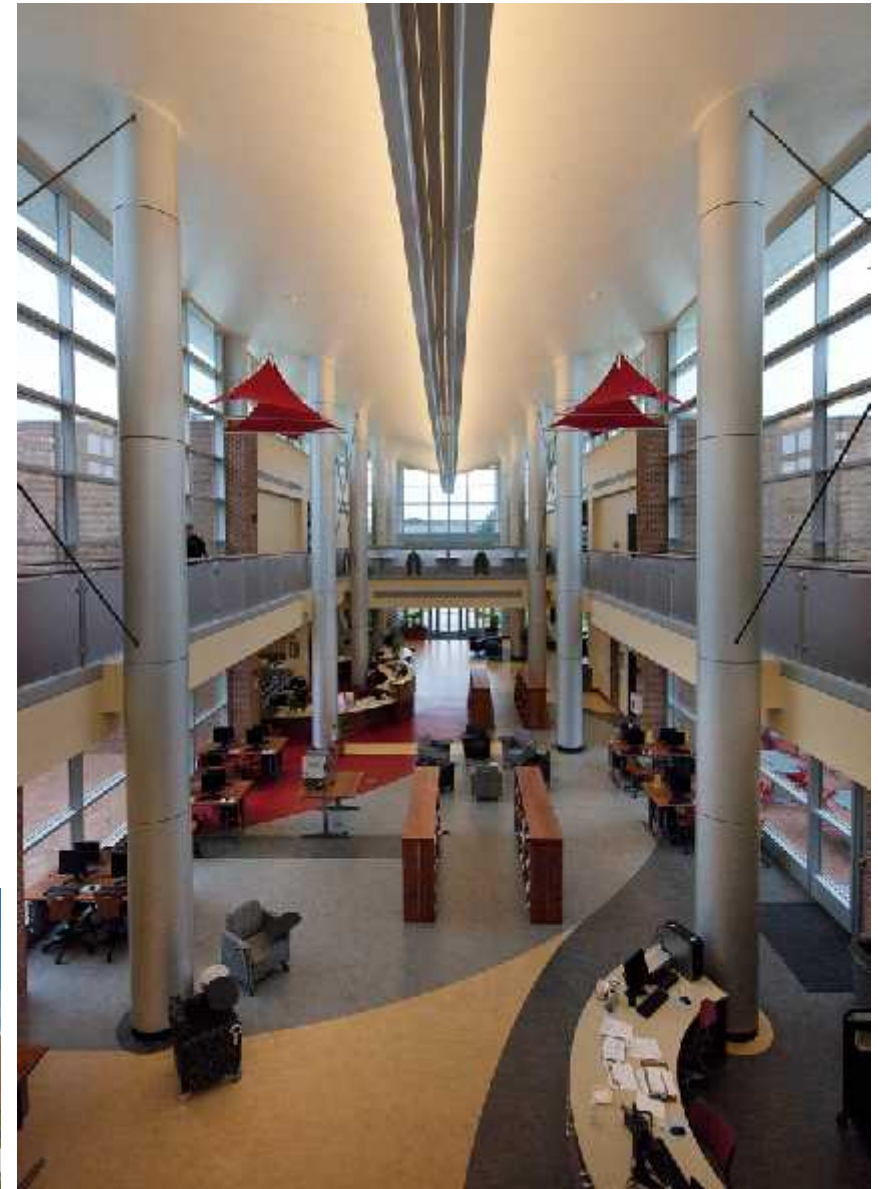
The building will embody Epping's vision and values and will enhance their pedagogy of the place. This building will symbolize hope and opportunity for the future while maintaining a connection to the school's past. While the exterior of the building will be a beacon to the community that learning is valued, the interior will embrace sustainable ideals; for, this building will be designed to allow natural light to penetrate from the Home Bases into the complementary and nexus spaces of the building. Since there will be no HVAC, this building will follow passive design principles where cool air is brought into the building at night and hot air is syphoned out during the day. Lastly, products and materials will be selected that are cost effective, durable, recyclable and minimizes the embody energy from production and installation.

This building will also be a place that will enable learners to develop their formal, informal, and creative skills. To achieve this, the building will afford:

Flexibility: As students are active, the building, the physical environment, must be designed with elements that afford activity / flexibility, i.e. sliding cavity doors between Home Bases, folding aluminium framed doors between Home Bases and the complementary spaces as well as group rooms and complementary spaces.

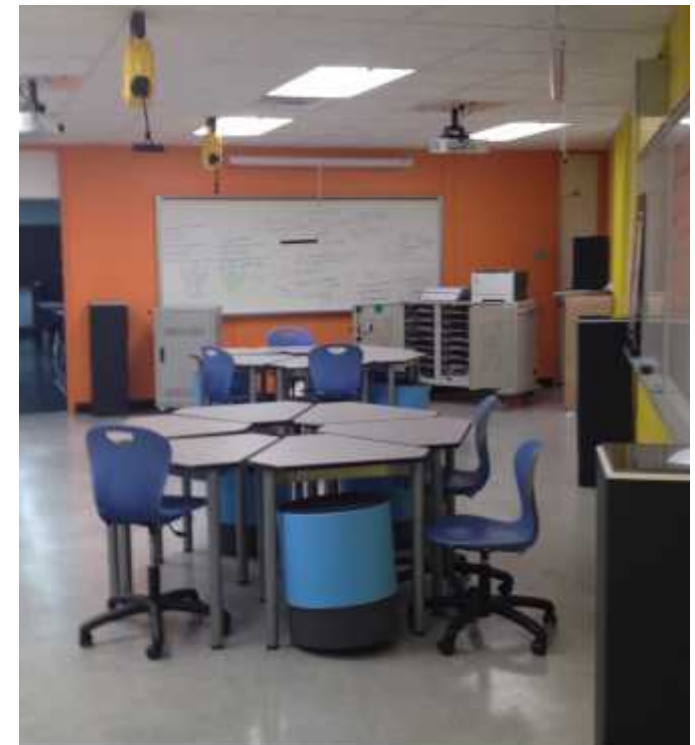
Collaborations: The building will be planned to support the various ways in which people collaborate and communicate. There will be spaces that are designed to support independent, one-to-one, small and large group learning opportunities.

Intentions: This building is a precinct that is intentionally planned with a variety of learning zones, activity settings within the Home Bases and complementary learning zones outside the Home Bases



BUILDING DESIGN CONCEPT

This project is a new learning precinct within the overall larger community. Hence, this building provides learning nodes that supports a ways of grouping of people with their own identity and way of doing things. These learning nodes will house the equivalent of 23 Home Bases along with semi-enclosed complementary spaces, Maker Spaces, Group Rooms, storage areas, and toilets. Furthermore, linking the learning nodes on the first and second floors will be an amphitheatre seating area, a Nexus, that may be be used as a gathering space for this precinct as well as a places where small social groupings may gather to work on different project at the same time. Furthermore, the spaces will be equipped with the appropriate ICT to enhance and optimize learning as well as enable the learner to appropriate knowledge and master skills. While this building is both practical and functional, it also will be modern to reflect a learning environment that is embraces current pedagogical thinking and in all ways is looking to the future.



HOME BASE (CLASSROOMS / GENERAL LEARNING AREA)

The Home Bases (Classrooms / General Learning Areas) are places that support the needs of approximately 30 learners. These places support both didactic, cooperative, independent work. Conceptually, these settings will be organized with six learning zones to support small group and independent work (Lippman, 2013a & 2013b). While learners will work in a variety of ways, the arrangement of the furniture will consider the choreography through the space, specifically the areas-in-between the different learning zones. The spaces-in-between offer learners the opportunity to choose how they want to engage (Mathews & Lippman, 2016). Hence, learners may choose to remain on the periphery or become engaged with others.

- The rooms will have virtual capabilities, i.e. projectors, LCD screens, Smartboards, and/or dimmers all controllable via tablets.
- In these spaces, a variety of moveable furniture (i.e. soft seating, tables and chairs and book shelves) is recommended.
- Display areas will be provided in the rooms to showcase students' work as well as to showcase specific topics appropriate to the curriculum.
- Home Bases will be located near toilets, store rooms, and other classrooms.
- Each room will have access to semi-enclosed complementary spaces..



SALIENT FEATURES OF THE HOMEBASE

Sliding Cavity Doors: Cavity sliding doors are recommended between Home Bases, whereas folding frames glass doors or sliding glass doors are recommended for access to central spaces. Cavity sliders, when closed, 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 Base which are safe and secure areas in which learners can focus on the tasks-at-hand.

Furniture: Given that the Home Bases are defined collaborative spaces, we recommend furniture that is not fixed. We also recommend a variety of furniture to be considered for these spaces, i.e. tables at which learners may stand, tables where learners may sit, chairs and stools, and soft seating (Barrett, et al., 2015). The reason for having moveable furniture is to allow teachers and students alike have the ability to craft their spaces in different ways for how they learn best. While furniture may be moveable, it is recommend that TVs should be fixed to walls.

Glazing: Along exterior perimeter walls and interior partitions provide glazing to connect learners to the actives and actions that occur beyond their current tasks-at-hand. Provide glazing in relationship to having wall space; for display students' work, White boards (installed vertically), and TV screens (or Smartboards).

Activity Settings: These exploratory learning zones serve as places of prospect and refuge that afford learners a sense of safety and security where they are able to focus on their tasks-at-hand (Moore, 1996;1979/1986).

Focal Points of the Room: Provide more than one focal point (vertical writing surfaces) in the rooms so that students' group and independent work may be shared with others. This affords self-awareness and social-awareness



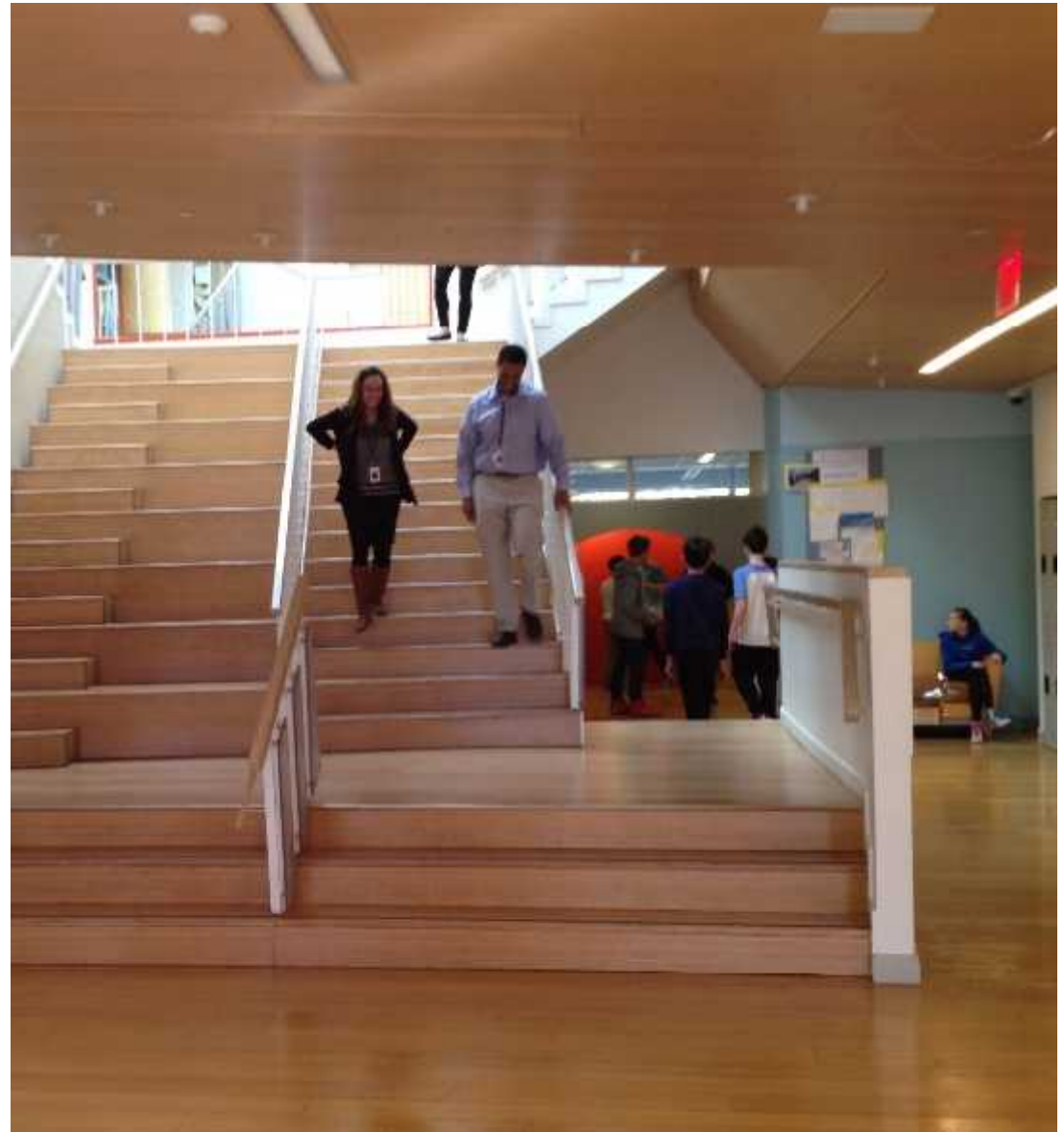
THE HEART OF THE SCHOOL BUILDING—THE LEARNING NEXUS

The key salient feature of Epping Public School is its Nexus. This is an amphitheater seating that connects the First and Second floors of the school. It is the heart of the school where ideas are encouraged to flow between learners.

This salient feature, the Nexus, in the physical environment is:

1. centrally located, essentially an open and tiered piazza in the building;
2. a learning area that 2-3 three classes can meet at anyone 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 learning nodes and classrooms, while connecting to the spaces inside the building. 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 that is multi-functional. It can be used to gather large groups (not the entire school or all the classes on the first floor at any one time), small social groupings, and a place that affords independent work. As this feature allows the whole learning community to come together, it also provides/affords and defines learning zones around it where learners can meet in small social groupings or where students may work independently (PEHKA, 2012).



THE LEARNING NODE

The Learning node is another salient feature of Epping Public School. At Epping Public School, the Learning Node is composed 4 or 5 classrooms spaces that share a variety of complementary spaces. These spaces include Group Rooms, Group Activity Areas, Complementary Niches, and the Maker Spaces. On the ground floor, along with the group rooms, group activity area, and Niches, the node includes an amphitheater that is shared between the Library and Home Bases. Each of these spaces are defined areas that support the diverse ways in which people work. The intention of these spaces is to encourage collaborative/ cooperative group work. These complementary spaces have been conceived as learning zones that extend the Home Bases. While the Maker spaces and Group Rooms are shared spaces, the niches and group activity areas are generally spaces outside the Home Bases. These Niches are, owned by a specific Home Base and as such should afford learning to extend beyond the confines of the classroom walls. Hence, these space complements the Home Bases. These spaces, while differentiated, afford and students choice in how they sues the building acquire knowledge.



COMPLEMENTARY LEARNING ZONES

Throughout the building there will be Complementary Learning Zones. These areas are outside and adjacent to the Home bases defined and attached to the Home Bases. They provide opportunities for small social groupings to come together and work on projects. In addition, they are places where facilitators can meet with a few learners or with just one learner. While they appear separate from the learning studio they are spaces that are integral to them. They offer learners refuge and prospect. In these settings, learners may work comfortably with less distractions and take moment, reflect, and look out to see what their peers are doing in the areas beyond.

Furthermore, these are Scheduled and Un-Scheduled collaborative study areas. These learning zones are attached to Home Bases so that learning may extend beyond the boundaries of the room. Conceptually and practically, these complementary spaces reinforce the notion that the things to be learned can happen at any time, in any place and anywhere in the school. The following complementary learning zones will be considered:

Group Rooms—These are private areas for individual and small group work for staff, learners, and parents. In addition, these rooms may be intentionally designed for meetings, building projects, digitally recording (provide a green screen), TV screens (or Smartboards) and access to Wi-Fi.

Nooks—These are learning zones that support small social groupings ranging in size from 1-4 persons. These spaces will be provided with vertical writing surfaces and access to Wi-Fi.

Niches—These areas accommodate 6 to 8 in group format. These complementary spaces will be provided with vertical writing surfaces, access to Wi-Fi and TV screens.



MAKER SPACES

Makers spaces are shared learning zones that are located adjacent to the Nexus. 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 should have direct access from the Home Bases.

Maker spaces connect to Home Bases via folding aluminium framed glass doors or sliding glass doors. Hence, when the doors are closed, the spaces become distinct learning zones. Given this, when the doors are opened, learning will extend from the Home Bases into the Maker Spaces. Furthermore, the complementary spaces that support the Home Bases may also support the Maker Spaces. Lastly, the Maker Spaces will have access to Wi-Fi and will be outfitted with white boards and TVs (Smart Boards)



GROUP ROOM

This is a space where:

- Teachers and/or learners can meet to reflect on the days activities
- EAL/D Learners and learners in general may work independently Learners can work cooperatively;
- EAL/D Learners and learners in general Learners develop practical / formal, informal, and/or creatives skills; and
- Learners can engage in quiet place with others to engage on the project-at-hand (Alterator, 2016).

In addition, these rooms may be places where staff can meet with parents, students as well as other staff members privately. When not used for learning, these rooms may also be scheduled for use by staff.



OUTDOOR COMPLEMENTARY LEARNING ZONES

The play areas will be planned to support the different aged learners. These areas should be nature based and will be designed in relationship to the contours of the site. Additionally, these complementary spaces will be designed to support a variety of activities to extend learning beyond the Homebases. These outdoor complementary spaces will afford large group meetings, small social gatherings, and independent work areas. The manifestation of these spaces might include:

- climbing areas;
- a garden;
- a construction area;
- a painting area;
- a reading are; and
- a water area as well as a mud area.

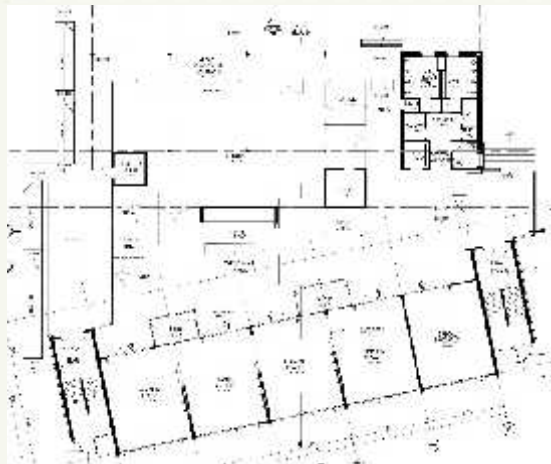


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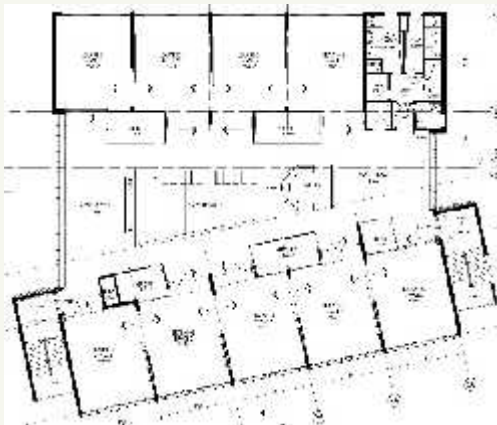
APPENDICES—LEARNING PRECINCT



Level 1-New Building



Level 2-New Building



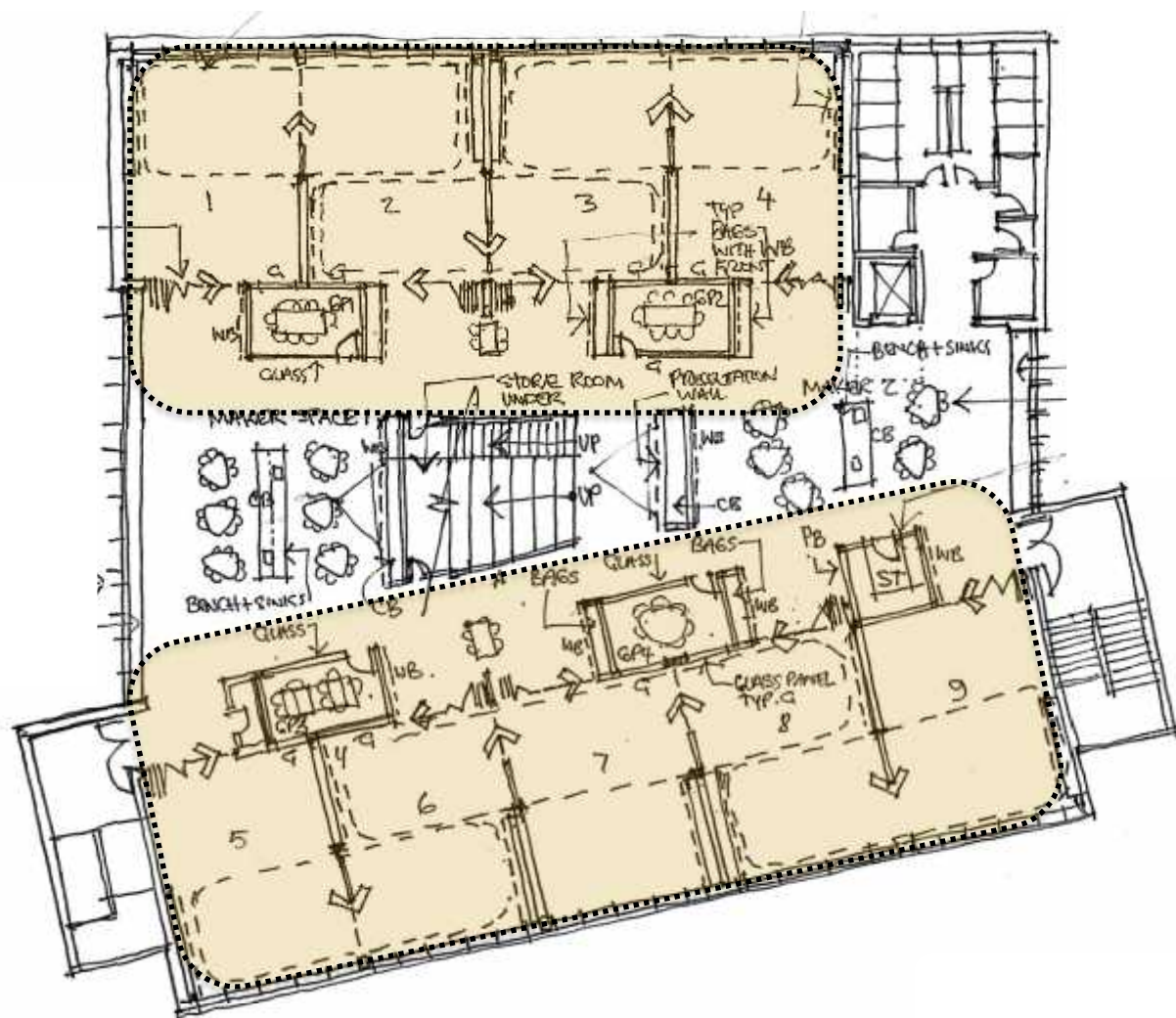
Level 3-New Building

The new 3-storey Epping Public School building will house an innovative learning precinct for this Learning Community.

- This will be a modern learning that enables activities to flow between and across spaces.
- The design supports a flexible spatial design; for, each setting may be re-arranged as needed to support the actions, motivations, goals of the learners.
- The designs fluid since it was to enable a pedagogical approach that enables learners to move from being peripherally engaged to being fully engaged in the task-at-hand. where learning is fluid.

This achieved by creating a variety of settings that afford the diverse ways in which people acquire knowledge.

APPENDICES—LEARNING NODES



Level 2-New Building

Legend:



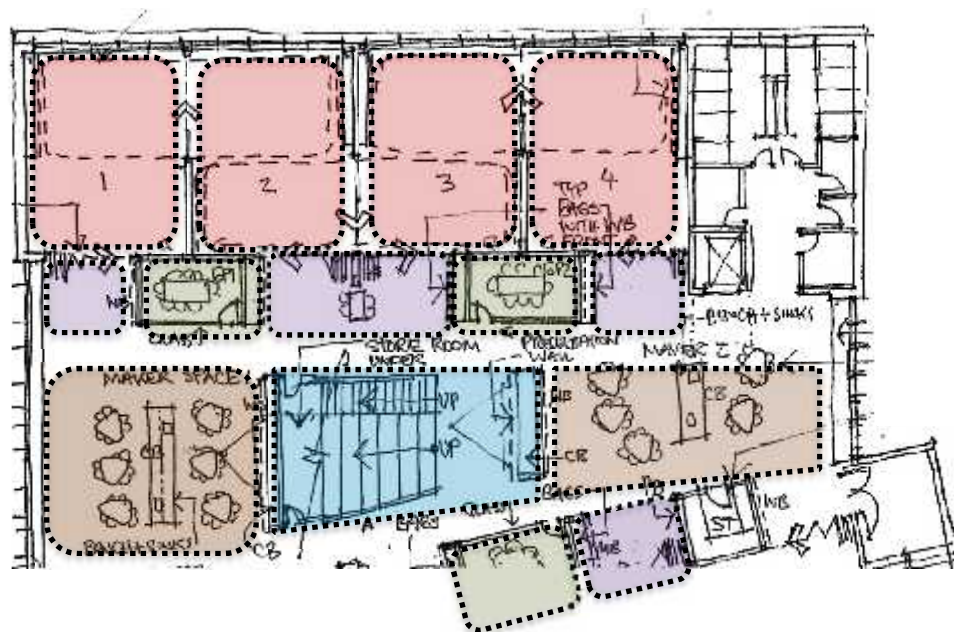
Learning Node

Conceptual Framework for the Learning Node

The Learning Nodes which may be defined as a group of people who share a craft and/or a profession. Hence, the goal of this design is to create a place that supports the sharing of information and experiences of the group so that members learn from each other, and have an opportunity to develop personally and professionally.


Hence, Epping's new building will be a place where learning is socially-constructed and where the teacher actuates the learner and the things to be learned. To achieve this, each floor is composed of two learning Nodes. These nodes have been designed with a variety of learning zones that afford privacy, prospect and refuge, safety and comfort which enables learners to acquire knowledge and master skills.


APPENDICES—LEARNING NODE



Level 2-New Building


Legend:


 Homebases 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.

Conceptual Framework for the Complementary Learning Zones

Complementary spaces are purposefully designed learning zones that enhance learning by enabling learners to choose how they want to work, where they want to work, and with whom they want to work.

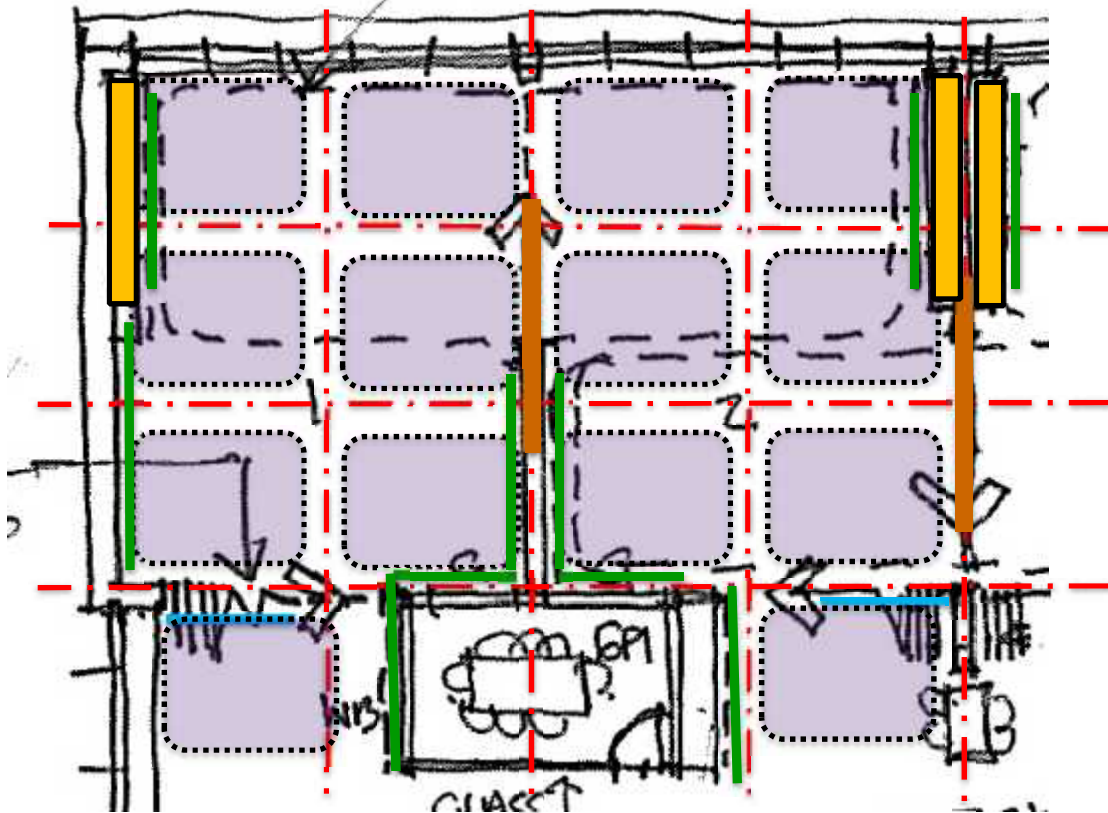
 Group Rooms/ Withdrawal Rooms are shared / scheduled private rooms that may support up to six people.

 Niche are complementary spaces that extend the Homebase. These are areas where a group of 4 or 5 learners come together and share their knowledge. Each Homebase has a niche area.

 The Nexus is a vertical complementary space that connects the Learning Nodes. This is learning zone that affords both formal learning opportunities for staff and students. Furthermore, this learning zone supports large group, small group, and independent transactions on the tiered area, as well as learning opportunities around and underneath it.



APPENDICES—HOME BASES W/ACTIVITY SETTINGS



Level 2-New Building

Legend:

- Sliding cavity doors between Homebases afford teachers to team-teach as well as work indecently as needed. These doors have whiteboard on both sides.
- Joinery (built-in) will provide the needed to storage for the Homebases. Joinery on casters so that they can be moved when cavity sliding doors need maintenance.
- 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.
- Sliding Glass doors (or folding glass doors to allow all learning to extend into complementary spaces.
- Activity Settings are learning zones in the Home Bases that are organized with furniture and furnishings by teachers to support small social groupings (4 -6 students) to work cooperatively.



Educational Model **FOR** Epping Public School

AUGUST 2017



PLACES CREATED FOR LEARNING

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08.2017