It is with delight that I write this message. The first article “Children as Makers” focuses on children as capable innovators and it also brings us halfway across the globe to Doha, Qatar!

This issue is about practices in Singapore and other parts of the world. Not only do we learn from each other but we are also enlightened by what is happening around the world. “Putting Relationships First” is about the Reggio Emilia approach that promotes responsive teaching and learning. “Green-blue Schoolyards” challenges us to look for opportunities to implement what others have done around the world.

Right back in our own backyard are ideas on “Knowledge Building” and “Ubuntu”, a concept transported from Africa which embraces hospitality, caring about others and being willing to go the extra mile for the sake of another.

Early Educators has brought us around the globe as our cover page suggests, portraying our global perspective and ending with the importance of early literacy by making use of picture books. There is also a lovely book review of two children’s books written by our local authors.

Indeed, this issue is a folio for educators by educators! Enjoy reading and be inspired to contribute to our next Folio.

Fondly

Dr Christine Chen PBM
President
Association for Early Childhood Educators (Singapore)
Contents

Page

1   President's Message

3   Children as Makers
    - A’qilah Saiere and Belinda Chong

11  Putting Relationships First: Using Principles from Reggio Emilia to be Responsive to Our Students
    - Traci Childress

19  Green-blue Schoolyards: An Effective Investment for Early Childhood, Nature, and Climate
    - Julien Vincelot and Esther Goh

26  Knowledge Building and Young Children: Learning Sciences and Early Childhood Pedagogy
    - Dr Teo Chew Lee and Dr Manasi Pande

40  Ubuntu
    - Loy Wee Mee

44  The Benefits of Using Picture Books for Building Literacy Skills
    - Shameer Bismilla

51  Candy Makes New Friends / Candy is a Good Helper
    - Mabel Wee
Children as Makers

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As teachers, we often hear about how we should emphasise the importance of process over product – it is all about the journey and not the destination when it comes to teaching and learning. What does that look like in an actual classroom? What happens when we give children the autonomy to focus on their process and decide what they want their product to look like? As Early Years educators, we believe in children as makers. We see ourselves as facilitators in the classroom that provide the children with the environment, resources and opportunities they need to inquire, explore and most importantly, create.

The idea of a maker is someone who makes, replicates, innovates and creates. To envision a culture of makers in a school is to imagine a community of people who partake in meaningful learning. Children are capable of leading their own learning and inquiry if we allow them to. Like adults, they are capable of creating and innovating by using the skills and knowledge that they have acquired from their experiences and using the resources in their environment. When we allow children to be the leaders of their own learning experience, we empower “them to feel a part of something much bigger and give them feelings of value and self-worth as they guide others through their daily routines.” (Zoromski, 2017). How do classrooms with a culture of makers look like? We are here to present two case studies from two different countries.

Case Study #1: Singapore
In Singapore, a class of five turning six year old children are exploring stories. When I started teaching, this was usually taught by simply letting the children know that stories are made up of different elements: characters, setting, problem, solution and ending.

It is a fairly simple structure to follow, and it gives everyone a checklist to follow when creating a story. However, the works that follow seem to lack individualism, or appear to be nothing more than just an assignment to complete. When the school started using the inquiry based approach to learning (IBL), I attempted to spark a maker’s mentality when approaching the theme of stories. The whole IBL process took a total of ten weeks, from start to finish, with the children constantly immersed in the process of making individually, and collaboratively. The tool that I used to help me with the process was the Stop Motion application, which is readily available on the Apple App Store. The application enables its users to take multiple photos with ease and string them together into a video. The time intervals between each photograph can be
adjusted such that the pictures switch to the next quickly enough to make it seem as though it is moving like a video.

**Setting the stage**
To start off the term, we came together to share our prior knowledge about what stories are. With each and everyone’s different backgrounds, culture and experiences, we found that stories come in many different forms: songs, books, plays and movies. The children explored the kinds of stories they can retell and create. They came together and indulged in some collaborative sharing; by commenting on their peers’ individual stories, giving feedback, or participating as an involved listener when a peer’s story was presented.

After some exploration with story creation and recreation, the class came together to talk about the kinds of movies they had watched and they had a conversation about how much they enjoyed movies and TV shows. We then decided to explore making a movie!

**Preparation and development**
The children worked in teams of 6 for this project. The whole process was new to the teachers as well so it was something we had to learn together. We watched behind-the-scenes clips of stop motion films (mostly by Adam Pesapane who goes by the moniker, PES) and came up with a list of things we would need to prepare, like having a storyboard, props and capturing and adding of sound.
The children first decided on the story. Each had created their own individual stories but they all voted for one team member’s story, they made a few adjustments to it by adding snippets of their own story into it. They prepared the props, either by fishing them out of the cupboards or making their own and setting their own stages.

After that came a process of snapping photos and piecing them together in the application to create our movies. It was exciting to see the pictures moving after being pieced together. After watching the complete movie, they noted that it was a silent movie. They had a brainstorming session, they talked about the types of sound effects they could insert. They came up with innovative ways to recreate the sounds, like using their fingers drumming the table for sounds of walking.

The making of this elevator went through a few debates. K wanted to fix it up with a string that we can pull down (like a pulley system because we touched on it that week) until S decided on using a stick so we can pull the elevator up and down in the hotel.
Embarking on the long process of making the movie. Children had to figure out how to make the girl character look like she is singing the refrain in the story. A peer suggested moving the girl up the tree each time she sings in the story.

The movie premiere was next. The children were excited to showcase their movies and there was a lot of hubbub surrounding the room. We talked about how we made the same thing differently. The complexity of the project was also brought up, the children talked about their challenges and how, ultimately, they overcame it.

Reflection
This stop motion project made me realise that the children were taking complete ownership of the process and product. They were emotionally invested in the project and were extremely satisfied each time their movie was a few seconds longer after an hour's work. The idea of making a movie from scratch was such a novelty. They had never known how it was done before even though it was something that they all enjoyed in the theatres or on television.

In this makers' community, we were all heavily focused on the process to ensure that we get a successful product. The children experienced many failures, like a poorly shot frame in the middle of the movie, or not being able to get a prop to work on set. However, they were able to find ways to communicate in the social setting to get the work going because everybody wanted to make a successful movie. Figuring it out together was an exciting journey for all of us. We were all movie makers!

Case Study #2: Qatar
Qatar is a community not too different from Singapore. It is up and coming and its diversity stems from it being a hub where professionals from all over the world come to work. Smacked right in the heart of Doha, there is a school that caters to providing
a culturally-responsive yet globally-relevant curriculum to the local community. I lead a team of 11 teachers that work with children from ages 3 to 5 years old. With the IB curriculum’s transdisciplinary themes as my guide, we work on various topics to cover the children’s holistic development.

**Setting the stage**
On one occasion, as we worked on the transdisciplinary theme of “How the World Works”, the 4 year olds delved into the topic of “Materials”. What better way to explore and discover the properties of materials than to experiment with them? They worked on this topic over a period of four weeks where the inquiry cycle included investigating different types of materials, their sources and how they are used. Towards the end of their unit, the children then decided that with the knowledge they have about materials, they would make their own toys.

![The children collected recycled and reusable objects and explored their texture, shape, size etc. They also took time to investigate the source of their materials etc.](image)

**Preparation and development**
They spent more than three weeks sourcing for different recycled and reusable objects. They learnt to source from their environment and from their community. The children went around the school asking teachers and peers for recyclables. In this process, they built persuasive language and learnt to negotiate.

The children then moved on to planning and building their toys. They first drew their ideas on paper and made specific plans and decisions as to which materials to use to create their invention. The children were challenged with questions on how and why they had made those choices. After weeks of experimenting and building, their toys were finally ready. They exhibited their work to parents and teachers and explained
their inventions. The toys were later returned and used in class for various activities including free play, role-playing etc.

Reflection
Throughout the unit, the children were given the space to express, explore and discover. They in turn used that experience to represent themselves in a way that they felt best described them - through their self-made toys. They inquired, reflected, communicated and had to remain open-minded as they experimented and created. Not only did the children develop a strong sense of curiosity and creativity, they also developed resilience when they had to make changes to their toys in instances when the materials could not work.

As an educator, this is an example of a process of learning that is meaningful, engaging and enriching. The children were empowered and had autonomy over their own learning. The environment also allowed for learning through mistakes and in this, the children became more vested in their journey and were not unnecessarily focused on the product.

Conclusion
One of the most important factors that contributed to the success of creating a culture of makers in the classroom is for teachers to see themselves as lifelong learners. "By embracing a student-like mindset and learning to turn self-education into a daily habit, you can hone your current skills and develop new ones while enriching your mind," (Jun, 2014).

There are six practical steps that we followed closely when adopting this approach:

1) Putting Our Heads Together
At the start of every term and project, the children were often given the space to explore and discover collaboratively. Through small and large group discussions in the classroom, teachers picked up on children’s prior knowledge and, in turn, were able to contribute with their own experiences and knowledge. Classroom discussions became the perfect peer-learning platforms for children to listen, learn from and collaborate with each other.

2) Experimentation & Discovery
With every project, it was important for the children to be given ample time to explore and discover with the materials and tools they were working with. This was a crucial step in the process. It helped the children learn new information at a deeper level than just passive learning. This part of the process also allowed them to draw on their existing knowledge and learn from one another.
3) Making a Decision as a Community
Deciding and coming to a common goal as a class community was crucial to the success of the project. This gave the children a platform to negotiate, collaborate and compromise. It also allowed them to learn each other’s similarities and differences and how to work around that - a crucial life skill.

4) Designing and Learning
After making a decision as a community, they start working on their designs. This was also an opportunity to introduce a professional they can learn from; for instance, in this case, an author, a director or a producer. This was an extension of the notion of teachers as lifelong learners, which reinforces the fact that teachers do not always have the answers and when they do not, the community steps in to help us gain knowledge and develop our skills.

5) Making it Happen!
This was the most exciting part of the entire process, observing and documenting how the children worked to make their ideas come to life. Be it directing and filming an animation or making a toy from scratch, the children were given complete autonomy to lead the way. The teacher plays the role of a facilitator. During this process, it was not uncommon for some children to turn to you for help. This was when you facilitate open-ended questions where relevant. This was a wonderful platform to build resilience and perseverance.

6) Appreciating and Reflecting
No learning would be complete without reflection. “Reflection gives the brain an opportunity to pause amidst the chaos, untangle and sort through observations and experiences, consider multiple possible interpretations, and create meaning. This meaning becomes learning, which can then inform future mindsets and actions.” (Porter, 2017). For example, holding an exhibition allowed children to reflect on their own journey whilst explaining their process to someone else. It also provided them with an opportunity to appreciate their peers’ work and to learn from them.

We live in a world that is in a constant state of transformation. Early childhood classrooms are not just avenues for children to be made ready for school. They are a safe space for them to develop values and skills for life. A culture of makers in the classroom scaffold children to discover and achieve their highest potential whilst we develop a nation of innovators.
References


Putting Relationships First: Using Principles from Reggio Emilia to be Responsive to Our Students

Traci Childress
St. Mary’s Nursery School

“But we don’t have any wooden loose parts,” one of the teachers says during staff training on Reggio Emilia practices. Our school is “Reggio inspired,” meaning that we use an emergent curriculum inspired by the educational approach articulated by Loris Malaguzzi in Italy. “How can we do this without the right materials?” is a common question at our center as we unpack what Reggio means to us. Over the past four years, we have been working to answer it in ways that are meaningful to our community.

As a culturally diverse urban school, we have a unique landscape for our work with young children. In our community, we have families that speak over 25 home languages other than English. Staff are also culturally and linguistically diverse. This diversity brings with it myriad different perspectives about the world, about education, and about children. We came to understand that exploring what Reggio means to our school required us to look more closely at how we create relationships with children and families and how we plan, rather than focusing on the external artifacts often associated with Reggio Emilia practices. The principles of observation and reflection in planning have helped us become more responsive to the cultures that children bring with them to the classroom.

At the heart of our school is the idea that, as has been beautifully articulated by Sandra Smidt, every child arrives in our classrooms with “pieces of the world,” and it is our job to understand those pieces. Learning to understand each child’s pieces is a way to be culturally responsive. Educator Souto-Manning describes a culturally responsive teacher in a way that guides our work by:

- **Integrating** different perspectives and experience into classroom activities and materials
- **Understanding** the different ways that learning can happen and how children are impacted by the culture of the school, the classroom, and the teacher
- **Reducing** bias and prejudice that we have as teachers and schools
- **Honoring** the child by inviting input into classroom and activities
- **Adapting** approaches to accommodate each child’s needs
- **Inviting** all school members to be involved in education.

At its essence, the Reggio practice of observation and reflection allows us to be more aware of who our children are and who we are. These practices become ways to make
As teachers learn to plan emergent curriculum based on children’s interests, they need guides to do so. We needed time for reflection, planning, and team meetings. We also needed to find more open-ended ways to notice children’s activities that were not an assessment. We started working with learning stories, which we sent home to families about once a month, giving them windows into our days.

Learning stories are snapshots of learning moments that children experience. Each teacher group is tasked with doing a learning story for at least one child per month. The goal is to describe what is happening, explain what provocations and tools were provided and used, and record children’s words and dialogues. Teachers are encouraged to include original artwork, copies of artwork, and/or photographs of the moment as they can. This concrete tool can be used for lesson planning as well as for communicating with parents about their children’s learning at school. Avoiding judgmental language, we practice simply describing. This practice enables teachers to become more aware of ways that each child learns, and therefore more able to plan activities that scaffold learning for each child. Learning stories support teachers’ development of their own reflective practices and their capacity to see children’s play and understand its value.

While learning stories helped teachers cultivate a practice of seeing children differently, planning based on these ideas remained a challenge for our teachers. After a year of working with concepts of listening and being responsive, we convened a meeting with one of our teaching teams to try mapping out more concrete ways to use reflected practices for emergent planning. We walked through the process of planning an open-ended lesson as a team. We took the notes from our process and crafted a draft of an emergent curriculum guide. This guide was shared with the full school teaching community and teams used it over the course of the following year. One of the teams also adapted this very long guide into a lesson planning template that further supported the team’s planning. The planning guides used emergent curriculum questions and applied them to specific plans for each week and for each part of the classroom.
This initial teaching guide was made up of reflection questions similar to the ones in the chart on page 18, some questions intended to discover possible meaning in play, and a section of questions to help make concrete plans that relate to parts of the classroom. Because our teaching teams are large and because many teachers are newer to planning in this way, we decided to use classroom areas to help make the application of ideas more manageable and concrete when carrying them out. After answering the above questions, we go through each classroom area (e.g. art, blocks, dramatic play) and plan ways to be responsive in light of the answers to our reflection questions. We also added a section for teachers to connect all of this to specifics, such as particular songs or books. This tool helps teams work together and follow through on their team planning and teaching.

We have learned that families need opportunities to impact changes and provocations in our classrooms. For example, when we started work to revamp our practices three years ago, many teachers were struggling with classroom management and with how to redirect challenging behaviors. We began to use social emotional literacy practices, building practices into our day-to-day activities that would allow us to better navigate challenges. As a part of this effort, we began to create quiet spaces in our classrooms.

When we first shared with families that we were creating quiet areas, one family expressed their concern: “What do you mean you are putting them in a silent corner! That is punishment.” We realized that we needed to introduce our practice in regard to the quiet area with a broader perspective, inviting families to our process and finding ways to understand what parents expected of us and wanted for their children. As we made our intention for the quiet area clearer, the same parent who had been so concerned stepped forward to help us build the area. She brought in a fabric canopy and some special LED lights to help us make a new space in the classroom where children could happily retreat.

We learned that we had work to do to ensure our responsiveness took into account a broader possible understanding and a clearer articulation to parents of our actions as educators. We needed to tell the story of why we were making changes and how the changes impacted needs we saw; we needed to explore how we talked about those needs, and how to invite families to bring their ideas forward. We also learned the importance of invitation - of asking what we could invite parents to do as a part of the changes we were working toward.

We also began to consider our capacity to offer more materials in languages other than English and include more materials from diverse homes. The goal of full translation is a pricey one, especially considering all of the materials we have as a school and the many languages spoken, but we have made a start. We have translated some materials into Mandarin, as we have a large group of families who speak Mandarin. We have also put out invitations for contributions of materials. For example,
we have invited families to send in photos of their children’s breakfasts (which we added to our Family Culture Board described below) and we have used these photos as classroom materials as well. We printed them, laminated them, and added them to our play kitchen areas so dramatic play can incorporate a broader diversity of food.

Our Family Culture Board posts a community question that we invite families to answer by writing on a piece of paper provided and tacking it to the board, writing directly on the board, or emailing us photos we print and add to the board. We have also invited families to email photos in response to questions. The question changes every few months. Two of our most successful community inquiries were: (1) send us a photo of what you eat for breakfast and (2) send us a photo of your family in front of your front door. In the second instance, we invited families to also note where each family member was born. This activity made very visible the diversity among our community. The breakfast photos showed how differently we all eat, and the entrance photos with the birthplaces listed showed how many different parts of the world we come from, even within a single family. For our school, responsiveness includes adjusting practices, language, materials, perspectives, and approaches to learning.

Who we are as educators determines how we create our educational spaces. So we also must work on knowing our particular lens. So we regularly look for ways and opportunities to ask how our own identities (e.g., racial, gender, cultural, linguistic) impact the way we are seeing and responding to our children. Using the work of educator Lisa Delpit, I have outlined four additional questions I think are key to our practice of responsiveness that will continue to guide me in my work as a director:

• How can we learn about our students’ lives, families, and cultures?
• How can we invite children to help co-create learning spaces?
• How can we invite parental input into our learning environments?
• How do we do the above while meeting state and federal mandates and ensuring that all children we teach are prepared for the expectations the world will have of them?

We, as a school community, are still working on our practices of reflection and observation in the classroom. We are also working to increase our individual understanding of ourselves as people. To teach in a multicultural society, educators must know themselves and their own perspectives; they must also seek to know their students; their students’ cultures, expectations, and families; and more about their students’ individual lives. At our school, using some of the tenets from Reggio Emilia have helped us identify and use practices that allow us to listen, hear, and observe our children and our families and to respond to their diverse needs with more fluency.
Notes:


For Further Reading


Saint Mary’s Nursery School  
Learning Story: Example

<table>
<thead>
<tr>
<th>Child’s name:</th>
<th>James</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher name:</td>
<td>Lesley</td>
</tr>
<tr>
<td>Date:</td>
<td>Sept 16, 2016</td>
</tr>
<tr>
<td>Where:</td>
<td>Big room in the block center</td>
</tr>
</tbody>
</table>

**Description (shows child exploring something):**  
James was playing in the block center with three children. He had been there about 10 minutes working on a structure. The structure was built mostly from the longest blocks standing on their narrow sides. When he tried to add the triangle pieces, they fell every time. Several times, they fell on friends. One friend told him, “That is not nice when it falls.” James said, “Help me fix it; it always falls.” The two children had a conversation about how to fix it. “Let’s do the pointy ones on the bottom,” the friend suggested. They went on to do this and invited a friend to look at the new building. “It’s tall and pointy,” James said, clearly proud of the way they had solved the problem.

**What next?**  
It will be interesting to ask James about his building activities at home; at school, we might invite him to rebuild a structure with the same block shapes - long rectangular and triangular - to see what he does and to support him to learn about the shapes, about balance, and about what is stable and what is not.
### Emergent Curriculum Questions

#### REFLECTION
- What is the theme for the month?
- Did I communicate the theme to families? Was there responsiveness?
- What did we do last week that children seemed to like?
- A snapshot of the children interacting, materials children liked, interactions to explore, etc.
- What did they do that showed that they were interested?
- What might they have been curious about in addition to what I think they were interested in?
- How can I break open/explore the larger theme further?
- Which children seemed less interested? Do I understand why? How can I test my understanding?
- How could I have engaged families in what we were learning?

#### ENVISIONING WAYS TO BRIDGE TO NEXT STEPS IN LEARNING
- What can I do to support the specific interest I saw children express?
- What could be some related interests?
- What can I set up or bring to the classroom to help children explore possible related ideas?
- How can I ensure that my materials and plans are responsive to all children?
- How can I engage families in gathering family-specific input to my planning or our theme?

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Green-blue Schoolyards: An Effective Investment for Early Childhood, Nature, and Climate

Julien Vincelot and Esther Goh

Introduction

In rapidly growing and urbanised cities, there is a need to ensure that cities remain sustainable and resilient, such that they support the health and well-being of its inhabitants, particularly the youngest. One such solution is in the provision of green and blue infrastructure. This refers to natural and semi-natural landscape elements on various spatial scales and includes a wide breadth of elements such as trees, grass, parks, pools, and ponds. This article shares a case study, originally featured on the Early Years Starter Kit Website, which was produced with the support of the City of Rotterdam and Ian Mostert, project leader at IVN and former Director of Speeldernis. Following the case study, the article will highlight some examples from the Asia Pacific region and what implications it has for the region.

The Green-blue Schoolyards programme is a subsidy and technical support programme by the city of Rotterdam, currently for the period of 2019–2022. It addresses child-friendliness and climate adaptation agendas with a common solution: more nature in schoolyards. The programme supports schools to transform their outdoor spaces into natural play areas for outdoor educational projects and community use.

© Ian Mostert

1 Published in the 2020 ARNEC Connections and reprinted with the permission of the authors and ARNEC.
2 Urban95 Coordinator. Bernard van Leer Foundation.
3 Early Childhood Specialist. Bernard van Leer Foundation.
The programme sits at the intersection of several strategies: child-friendliness, urban greening, and climate adaptation. It aims to increase the number of green spaces (such as parks) and blue spaces (such as lakes, canals, and waterfronts) to address both the problems of families living in neighbourhoods with few attractive natural play opportunities and the risks associated with climate change. Green and blue spaces are known to provide compound benefits to residents and city authorities: active and healthier lifestyles, lower stress levels and better mental health for residents, better stormwater management, reduced heat island effects, and increased real estate values for the city.

The programme has been funded through the municipality budget to focus on five or six schools in areas with fewer public green spaces and higher socioeconomic vulnerabilities. The schools are also selected to cover different areas of the city, through the lens of equity.

The implementation process is led by the schools. They can receive funding to engage in a significant nature-based makeover of their outdoor spaces. The design process is participatory, involving children, parents, and the community, and must lead to the schoolyard being accessible to all residents outside school hours, including for families with children under school age.

“Our green-blue schoolyards are an example of how spaces can be more beautiful, healthier, and safer. The green reduces heat stress and the blue makes us smart with water, and children from the school and neighbourhood have a nice place to sport and play.”

— Bert Wijbenga, Counsellor and Deputy Mayor, Municipality of Rotterdam

What worked well?

1. **A strong vision with the child at the centre.** A vision that places children’s well-being and development at the centre is sometimes hard to maintain when budgetary constraints arise or deeply risk-averse habits of adults (professionals and parents) prevail. The Green-blue Schoolyards programme insists on a strong shared vision, which has helped schools manage resistance to changes within their neighbourhoods. This also helps to build resilience and sustainability; and to change the mindset of education staff, management, construction companies, and parents. This shared vision needs to be constantly maintained and refreshed among stakeholders to stay relevant and effective.
2. **Smart spending – securing financing by identifying co-benefits.** By addressing several topics important to Rotterdam’s leadership through a single intervention, the Green-blue Schoolyards programme allows funding streams to be combined, thereby unlocking larger amounts of budget. In this case, it enables child-friendly initiatives to be added on to existing investments from the existing climate adaptation efforts that are underway.

3. **A balanced and data-driven selection process.** Each applicant school goes through a selection process that uses criteria relating to characteristics of the neighbourhood (50%) and the motivation of the school written in a project plan (50%). Data for the first half of the assessment is quantitative and comes from the city of Rotterdam, such as the area’s proportion of green surfaces, spaces for play, vulnerability to flooding or urban heat, and socioeconomic indicators. The other half is qualitative and involves meeting with the school’s leadership, understanding their motivation, and assessing their vision, their engagement, and their capacity for maintenance, programming, and training. The selection team, which also manages the programme, includes staff members of various city agencies such as education, health, and spatial planning.

4. **Schools leading implementation.** The leading stakeholder is the school. This allows the project to be anchored in the neighbourhood, closer to residents. The schools oversee maintenance and activity programming and retain ownership of the new green-blue spaces. They can adapt each project to their own identity – especially in the programming of activities. Changes within the school’s organisational culture are therefore driven by their own vision, rather than by top-down direction from city hall. This approach further enhances local ownership and the long-term sustainability of the project.

5. **Local technical support.** The green blue school year model\(^4\) has been thoroughly tested in Speeldernis, a popular natural playground organisation that engages in nature-centred play as a way to solve social issues prevalent in Rotterdam. The local organisation’s former director, Ian Mostert, has extensive expertise in the design and management of nature playgrounds and in the cultural and educational programming and community-building processes needed to turn these spaces into social hubs. By bringing local experts to support schools, the project is able to ensure that each space works for all neighbourhood residents. The local experts also act as hubs for peer learning among schools taking part in the program and organise workshops for school...
managements to meet, inspire and support each other, and share their experiences.

What didn’t work well?

1. **Complex systems are hard to change.** Green-blue Schoolyards programme requires the cooperation of many stakeholders, from city agencies to schools, parents, children, and neighbourhood organisations, each with their visions and objectives for the project. It is sometimes challenging to keep everyone aligned around the well-being and development of children. Each schoolyard renovation project needs to deal with various levels of risk-aversion and other constraints such as budget limits or construction protocols. It also faces different opinions within the community related to outdoor education, neighbourhood activities, maintenance standards, and tolerance of noise generated by children. To mitigate these difficulties in implementation, the programme manager tries to devote a significant amount of time to vision building, strengthening and alignment among stakeholders before diving into implementation. This is important as the programme is looking to change not only the environments but also the minds of the stakeholders who will manage these playgrounds.

2. **Fragmented implementation requires more coordination.** Having schools take the lead in implementing the programme helps tailor projects to specific neighbourhoods but means that overall coordination is more fragmented. This can prove challenging for assuring quality and ensuring that projects are
following implementation protocols and conditions. Other cities such as Amsterdam or Paris have similar programmes for greening schoolyards but manage them centrally from within the city government to avoid this issue. In Rotterdam, the challenge is addressed by having an external expert, Ian Mostert, who used the Speeldernis as a good example, the expert nature playground organisation, act as technical support and reviewer, as a hub for schools to meet and learn from each other, and get the training they need to carry out quality implementation.

3. Managing inconsistencies from city- to national-level policies. When implementing Green-blue Schoolyards projects, schools are confronted by a series of protocols, regulations, and entrenched practices related to risk, liability, construction guidelines, sanitation, and education that sometimes come into conflict with the objectives of the project. This stems from national-level regulations and laws that have not yet evolved to reflect the new mindset on play and risk that Rotterdam is adopting with this programme. For example, the national policy for schoolyards does not grant much financial freedom for schools to take the lead in organising their own education programming and environments for children, a situation that makes it difficult for schools in Rotterdam to adapt their budget to their child-centred vision.

What does this mean for Asia?

Above we shared an example from Rotterdam, the Netherlands which highlighted how the local government is increasing green-blue infrastructure across the city. Across the Asia-Pacific region, there are also several such examples.

- **Seoul, Republic of Korea:** From 2003 to 2005, the government demolished an old six-lane highway in need of repairs and restored the Cheonggyecheon Stream as a green-blue public space which has proven popular for strolling, sportive activities, and community events (Development Asia, 2016). With strong political will, the Mayor of Seoul was able to gain approval and finance the project. This brought a paradigm shift in how citizens and children experience the city they live in, prioritising green-blue infrastructure, and an improved quality of life. Specifically, it provided a protected and engaging space for young children to play and interact with the built and natural elements around them.
• **Ha Noi, Viet Nam:** Since 2017, the social enterprise Think Playgrounds has designed and built 167 playgrounds in Hanoi and other provinces, with a focus on promoting play with children under 5 years old in consultation with local communities. Utilising natural materials sourced locally and sustainably, the organisation worked closely with the local government to identify potential public sites, with a commitment from the local government to maintain these sites. Despite initial scepticism, the local communities have now embraced the playgrounds, with young children and caregivers frequently visiting to play. The playgrounds also bring nature and play together, particularly in Hanoi, where the increasingly urban city has very few natural elements. This has led to increased public safety and social cohesion (Bernard van Leer Foundation, 2017).

In both examples, it was crucial that the needs of the community were considered and that the community was engaged in the process of developing the infrastructure. The early childhood development community can play a critical role in making evident the needs of the youngest children in order to increase the awareness of the urban community to the importance of including babies and toddlers in their designs and to bring their voices to the development of green and blue infrastructure.

By incorporating the experience of babies, toddlers, and their caregivers into urban planning and design, cities are enabled to help children thrive and become healthier, while also empowering caregivers. In addition, planning cities with the needs of babies, toddlers, and their caregivers in mind has been proven to make cities more enjoyable, safer, and healthier for everyone else. Early childhood advocates should work across sectors – including unusual suspects such as urban planners and designers - to ensure that all children have a good start in life. More specifically, early childhood development networks in the region could act as forums to connect early childhood specialists with local urban planning organisations working on improving human well-being in cities, raise awareness that urban planners have an impact on child development – even if they don’t always know it, and identify concrete opportunities for integrating the needs of babies, toddlers and their caregivers into city data and projects.
References


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Knowledge Building and Young Children: Learning Sciences and Early Childhood Pedagogy

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It is widely accepted that children learn how to socialize during their preschool years: away from home, they learn how to interact with peers and adults, and they experience new materials in a novel environment. Those who subscribed to Piaget’s (1972; 1980) developmental theory agree that preschool children do not have the conceptual structures to reason sophisticatedly. They would then assume that it is developmentally inappropriate to include learning beyond their cognitive level. This aspect of Piaget’s theory on preschool thought was challenged by Lev Vygotsky (Vygotsky, 1978 in Wertsch & Tulviste, 1992). Vygotsky explained that a child’s real developmental potential should rightfully be determined by the capacity to learn and solve problems under guidance or collaboration with others and their potential and capability should be understood through these social interactions’ scaffoldings.

The first five years is a time of enormous cognitive, linguistic and even conceptual capability growth (Walsh et al., 2006). From birth, infants display immense abilities to explore their environments. This view that a child has ideas on how things work and learns from his young peers to construct knowledge stands in stark contrast to earlier views on Piagetian and neo-Piagetian theorists’ development.

Though cognitive abilities can typically be understood in developmental stages, advances need not be limited by age. In the same vein, young children should not be seen as passive receivers of knowledge. Instead, our experience tells us that when we actively engage a child, we notice how quickly a child learns, picks up our cues and responds to stimuli. These observations and experiences present substantial implications for learning opportunities and early childhood pedagogy. Many a time, the child’s learning is limited by the imagination of the adults. We have read of how
nurturing and trusting parents have supported the development of children with learning disabilities to achieve great things in life. Yet very often in other cases, even as we notice the child’s immense potential, we quickly revert to our biases influenced by the developmental theory that the child cannot go beyond the developmental stage that defines him.

Research has challenged the common notion of what young children can do by suggesting that children as young as four years old can learn a great deal when they are in supportive environments (Pelletier et al., 2006). How children respond to opportunities and interactions for learning suggests the potentially important role that preschool programmes play in supporting independent learning and developing creativity.

Knowledge Building (KB) is an educational theory and approach that places greater emphasis on collaboration rather than the individual acquisition of knowledge (Scardamalia & Bereiter, 2010). KB seeks to engage learners in knowledge creation. Through such an approach, students own the learning, outcomes and processes; teachers become partners in learning.

**What is Knowledge Building: Building Principles**

KB pedagogy focuses on supporting children’s natural curiosity. The pedagogy centres on bringing children’s authentic ideas and questions into the work of the class so that the children establish more meaning in their learning. As a result, the class would go beyond the curriculum. At the heart of KB practice in the context of early childhood is the notion that authentic, collective creative work with ideas is possible with young children if provided with the right support and conducive environment. KB pedagogy is undergirded by twelve interacting principles on knowledge creating community.
### Figure 1
**Knowledge Building Principles (Scardamalia, 2002 in Resendes & Dobbie, 2015)**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Real Ideas, Authentic Problems</strong></td>
<td>Knowledge problems arise from efforts to understand the world. Ideas produced are as real as things touched and felt. Problems are the ones learners care about — usually very different from textbook problems and puzzles.</td>
</tr>
<tr>
<td><strong>Improvable Ideas</strong></td>
<td>All ideas are treated as improvable. Students work continuously to improve the quality, coherence and utility of ideas. This requires a culture of psychological safety so that people feel safe taking risks — revealing ignorance, voicing half-baked notions, giving and receiving criticism.</td>
</tr>
<tr>
<td><strong>Idea Diversity</strong></td>
<td>Just as biodiversity is crucial to the success of an ecosystem, so is idea diversity to knowledge advancement. To understand an idea is to understand the ideas that surround it — including those that stand in contrast to it.</td>
</tr>
<tr>
<td><strong>Epistemic Agency</strong></td>
<td>Students take responsibility for their ideas by determining the learning outcomes, processes, and the accompanying challenges. Students engage in negotiation and dialogue to fit personal ideas with others.</td>
</tr>
<tr>
<td><strong>Democratizing Knowledge</strong></td>
<td>The creation of knowledge is not confined to a few. Instead, all are empowered to create and are recognized as valid contributors to advance community knowledge.</td>
</tr>
<tr>
<td><strong>Pervasive Knowledge Building</strong></td>
<td>Knowledge Building is not confined to particular occasions or subjects but pervades mental life.</td>
</tr>
<tr>
<td><strong>Rise Above</strong></td>
<td>Creative Knowledge Building entails working towards higher-level forms of problems. It means learning to work with diversity, complexity, and messiness. By moving to higher planes of understanding, Knowledge Builders transcend oversimplifications.</td>
</tr>
<tr>
<td><strong>Symmetric Knowledge Advance</strong></td>
<td>Expertise is distributed within and between communities; community members understand that “to give knowledge is to get knowledge.”</td>
</tr>
<tr>
<td><strong>Knowledge Building Discourse</strong></td>
<td>The power is in the discourse — in collaborative interchanges that lead to better solutions, better explanations, and better ways forward.</td>
</tr>
<tr>
<td><strong>Embedded, Concurrent &amp; Transformative Assessment</strong></td>
<td>Assessment is part of the effort to advance knowledge — it is used to identify problems as the work proceeds and is embedded in the daily workings of the organization. The community engages in its own internal assessment, which is more fine-tuned and rigorous than external assessment, and serves to ensure that the community’s work will exceed the expectation of external assessors.</td>
</tr>
<tr>
<td><strong>Constructive Use of Authoritative Sources</strong></td>
<td>To know a discipline is to be in touch with the present state and growing edge of knowledge in the field. This requires respect and understanding of authoritative sources, combined with a critical stance toward them.</td>
</tr>
<tr>
<td><strong>Community Knowledge, Collective Responsibility</strong></td>
<td>Contributions to shared, top-level goals of the organization are prized and rewarded as much as individual achievements. Team members produce ideas of value to others and share responsibility for the overall advancement of knowledge in the community.</td>
</tr>
</tbody>
</table>

Images from Knowledge Building Community. Introduction to Knowledge Building. Retrieved from: [www.kbsingapore.org/12-principles54kb/](http://www.kbsingapore.org/12-principles54kb/)
Instead of dictating step-by-step procedures for teachers and students to follow, the principles translate into guiding questions and reflection tools to help teachers rationalise their moves and plans. The pedagogy looks towards a collective effort to explore and to learn more about the topic. In KB, students are responsible for improving their ideas and advancing the community’s ideas and knowledge. It is the children, supported by teachers and adults, who are expected to increasingly take on the responsibilities of questioning, exploring and seeking information (Bereiter & Scardamalia, 2014). The focus is on collective effort. This essence of KB marks the distinction between KB and other educational approaches.

**KB Principles and Play Pedagogy in Early Childhood**

KB differs significantly from the knowledge-telling approach in traditional classrooms, which typically occurs in the following sequence: teacher initiates questions - students answer - teacher evaluates and elaborates on students’ answers. Instead, KB engages students in collaborative improvement of ideas. KB pedagogy premises on authentic, creative work with ideas and it starts with the youngest students.

According to the Ministry of Education’s (MOE) most recent curriculum framework for early childhood education, Nurturing Early Learners (2012), the role of preschool education is to nurture children as “co-constructors of knowledge”, provide “authentic learning through quality interactions” and to facilitate a child’s development into a confident person, self-directed learner and active contributor (MOE, 2012).

The four most relevant principles that define KB pedagogy are aligned with the MOE’s kindergarten curriculum framework, vis-à-vis the learning areas and the learning dispositions as shown in Figure 2 below.

**Figure 2**

*Alignment of the KB principles with the Curriculum Framework for Kindergartens in Singapore*

<table>
<thead>
<tr>
<th>KB Principle</th>
<th>What the KB principle means to the teacher</th>
<th>Kindergarten Curriculum Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Real Ideas, Authentic Problems</td>
<td>Students explore problems about the world around them; these are problems initiated by themselves and those they really care about.</td>
<td><strong>Learning area:</strong> Discovery of the world&lt;br&gt;&lt;br&gt;<strong>Learning disposition:</strong> Engagement; Sense of wonder and curiosity</td>
</tr>
</tbody>
</table>
Another common pedagogical approach used in early childhood education which is also adopted by Singapore Kindergartens’ curriculum framework is “engaging children in learning through purposeful play” (also known as “learning through play”). According to Dietze and Kashin (2019), play is a self-initiated, intrinsically motivated activity. It involves spending time building new knowledge from prior experiences, and is a process, not a prearranged outcome. This principle of learning through play is also much aligned with the principles of KB pedagogy and here we teased out ways in which KB might value-add to the current practice of learning through play:

- KB pedagogy encourages exploration of ideas that drive young children’s KB efforts. For example, children are encouraged to explore ideas related to real-world problems by exploring “why do we need to recycle?” and not just “what are the recycling activities?” Other example of questions that came from students are “is cloud a system?” “Do trees have lungs?”.

- KB pedagogy focuses on the joy of working together, discovering that the more you know, the more you do not know; giving everyone an equal chance to contribute and learn.

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</tr>
</thead>
<tbody>
<tr>
<td>2 Idea Diversity</td>
<td>Students explore different ideas. They feel safe sharing half-baked ideas.</td>
<td>Learning area: Aesthetics and creative expression; Language and literacy; Social and emotional development Learning disposition: Inventiveness; Appreciation</td>
</tr>
<tr>
<td>3 Improvable Ideas</td>
<td>All ideas are treated as improvable, and students work to improve the quality of their ideas.</td>
<td>Learning area: Language and literacy; Social and emotional development Learning disposition: Perseverance</td>
</tr>
<tr>
<td>4 Rise-above</td>
<td>Students work with different ideas and viewpoints and attempt to move towards new and better ideas. They aim to learn more.</td>
<td>Learning area: Language and literacy; Social and emotional development Learning disposition: Reflectiveness</td>
</tr>
</tbody>
</table>
KB practice understands that learning is not so much a matter of getting the right answer as putting the pieces together to make sense and valuing the class learning as much as an individual’s own learning.

KB pedagogy centers on representing students’ ideas and knowledge in words, in drawings and making ideas visible to the class. Such visual representation of ideas motivates the whole class to further develop the ideas, leading to idea growth.

The Teacher’s Role in KB Pedagogy

In a KB classroom, duties that were traditionally reserved only for the teacher, such as creating and setting knowledge goals, assessing progress and the next steps forward, revisiting questions and revising strategies and so on, are handed over to the students as much as possible (Bereiter & Scardamalia, 2014).

Nevertheless, it is critical to highlight at this juncture that KB teachers are not simply “letting go” or letting the students struggle on their own. On the contrary, teachers work hard to scaffold the learning process. Some common strategies adopted by KB teachers to assist them in the scaffolding include listening to ideas and questions, supporting, modeling, designing, and planning for knowledge building to happen. Experienced KB teachers shared their common strategies: (a) they devised ways to stop themselves from giving the answers and talking more than the students; (b) they valued the children’s ideas regardless of how silly the ideas sounded, so long as they felt that the children were genuine about the ideas; and (c) they found all ways to scribe and archive ideas and questions. All these strategies take time and tenacity to implement in class. They require constant practice. Hence, instead of labeling KB as a teaching and learning strategy, it may be more appropriately regarded as a culture: a habit or practice that thrives over time with cultivation.

A KB Classroom in Action: The Food Wastage Project

The case study of Teacher Sandy working with a group of K2 students on food wastage which is framed under the bigger theme of “environment” demonstrates the value of KB pedagogy. More importantly, this case study allows us to appreciate the possibilities and potential of how young children grow and develop their ideas.

Taking Time to Decide on the Direction of the Inquiry

At the initial stage, Teacher Sandy encouraged the students to share ideas about “food”. She scribed all the ideas and questions and embraced all possible directions the inquiry questioned at this point in time (Figure 3). Her focus at this stage was for the children to understand that they were in control of their learning and their own experiences. Sandy reflected that ideas about food were relatively intuitive and naive
at the start, but the teachers took them all in. The teacher felt that it was essential to get the children to talk and listen to how they related to “food”.

Figure 3
Scribing Children’s Thoughts on their Knowledge about Food

Engaging in Real-world Problem, Real Community
After the teacher piqued the children’s curiosity and interest in the topic at hand, it was time for students to start generating ideas about the theme. Children went on a field trip to the Kovan wet market and hawker center. Later, they scribed their learnings from the trip and shared those with another class. At that point, the teacher paid special attention to questions, suggestions, or observations that arose. She continued to scribe those ideas on chart paper, and the class walls were filled up with the students’ unadulterated questions and ideas.
KB Talk to Connect Ideas (Idea Diversity)
At this point in time, the students had already come up with a pool of questions, ideas, and information which was displayed all over the classroom. They sat down for a KB talk. In this KB talk, students were given wooden blocks and they were told that each block represented an idea and that they had to share two precious ideas. This strategy aimed to help students understand the notion of sharing and building in two ways: first, to heighten students’ grasp of an “idea” and second, to help them appreciate the need to “share an idea” using wooden blocks to represent their ideas.

Whenever the child listened carefully and gave related ideas, not just any idea they fancied, they got to place the block close to their friend’s block. In that way, the blocks (ideas) came together as something bigger than individual blocks. Through the KB talk, the children began to understand the act of building ideas towards something bigger than the sum of individual ideas. The teacher supported consolidation and elaboration of facts by distilling a few common ideas and questions. Finally, the children agreed on the two questions: (a) what happens to the food waste? And (b) how to have zero food wastage? The students decided that they needed to answer both the questions as both were inter-connected.
New Information, New and Conflicting Ideas

With the renewed conviction of the collective inquiry, the children started to wonder how they could get the information that they needed in order to find out more about food wastage in school. The teacher brainstormed with the children on what was the best way forward, and the children came up with the following three things to do:

1. They decided to interview Uncle Jon who brought them lunch every day because they supposed that Uncle Jon could help them solve their problem.

2. They decided to track food wastage for two weeks in the K2 classes, including their own class. They also figured that their tracking should exclude classes with birthday celebrations because that would not reflect the class’ real food waste.

3. Finally, they would also like to find out what happened to food waste in Singapore and other countries by consulting books, YouTube videos, Google search, and parents. The teacher supported the children to come up with a tracking chart to track the food waste and the leftover food in the K2 classes. To achieve that, they realized that they needed to seek permission from the other K2 teachers. So, they explained their project and asked for permission from the respective teachers. Through this activity, the children also understood that it was necessary to value and respect other people’s decisions.
In the interview with Uncle Jon, the children realised that in addition to wasted food, leftover food that was not served also contributed to food waste. The children then re-planned their tracking chart as they only had a column for wasted food initially but later on, they needed to track the leftover food too. The children planned their tracking chart and took pictures of the wasted and leftover food to track food waste for five days (Figure 6b). The children later requested to interview their vice principal, as they wanted to see if they could convince the vice principal to order less food for the classes.

**Effort to Save Food Beyond our Class.**

As the children grappled with their own food waste problem, they became interested in food wastage in other countries. They suggested using the Google search engine to find answers to those questions. The children also brought many books from the library on food wastage and they had a sharing session in class. A field trip to a food pantry was also planned. The children asked the person-in-charge of the food pantry many questions such as: “Why can’t vegetables be donated?” “What is the difference between expiry and best before date?” “What is the importance of having different coloured tags for the bread? Can anyone come to ask for food in the food pantry and the foodbank?” The teacher later heard from one of the parents that her child questioned why she needed to buy two cans of food when the family only needed one. The parent was pushed to admit that she bought it because the items were on sale. The parent was surprised at how the child reasoned with her on her purchasing habit.
Pulling the Knowledge Together and Making a Change.
The children understood their contribution to food wastage. The class decided to reduce their wastage by getting everyone to share their food before they started eating so that the food would not be wasted. They successfully did this for weeks.

Figure 7
“We have to change too!” Children figuring out how to reduce food wastage in their class. They decided to share the food before they eat them so that all could finish up the food.

Spreading the Message
The children also created posters for K2 classes as a constant reminder to not waste food. To wrap up their learning, the children took a pledge to reduce food wastage. They came up with their own words and ideas for the pledge.

Figure 8
Children Making their own Pledge through Posters:
Challenges in the KB Process

One of the biggest challenges in this project was sustaining the KB talk to get the “big idea”. During the first KB talk, children had various questions that they wanted to explore. Discussing each question and identifying the most important one became challenging and long-drawn (the process took more than an hour). As a result, the teacher decided to vote and selected two most popular questions out of the 21 questions.

KB discourse is not something that comes naturally or easily to most people, let alone children. Not all children were willing to ask questions initially. It took time and practice before the children could engage in discourse. There were many instances when the teacher had to take time to invest in each question. That was challenging as the teacher did not want to give them the answers directly and could only prompt them to elicit the responses or solutions from them. The teacher’s efforts were worthwhile as that created a safe environment for the eager children to understand that all questions were valid and would be honored.

Significance of KB in Current Times

The COVID-19 pandemic has resulted in educators across the world creating a new context for education. Teachers are faced with little choice but to seek new ways to do things differently and flexibly to meet students’ emerging needs. This kind of emerging situation is exactly what KB pedagogy sets out to prepare us to do on a day-to-day basis. In such a situation, an educator’s notion as the knowledge-holder who imparts wisdom to his pupils is no longer fit for a 21st century education. With students being able to gain access to knowledge and even learn a technical skill through a few clicks on their electronic devices, we will need to redefine the educator’s role in the classroom. This may mean that educators’ role will need to facilitate young people’s development as contributing members of society – a role like theirs in KB pedagogy.

Moreover, children may need to continue to develop skills for learning outside of the regular learning environment for quite some time. For younger age groups, parents will probably have to step up and help support the teaching role. Providing parents with some KB resources such as how to support learning through play or using real-life opportunities to stimulate their curiosity is now important. By connecting learning opportunities to places in the community or home in tangible ways, children can learn beyond the confines of the classroom. Teachers and educators are also beginning to co-design KB resources for parents to engage with their children at home.

Conclusion

The knowledge economy needs creative, communicative, collaborative people who are committed towards public good. These are skills that children may acquire through knowledge building practices since KB emphasizes the concept of community and
around them. As educators, we must continue to cultivate a classroom environment where curiosity and wonderment are valued and where to give our children the opportunities to work with problems and issues that are meaningful to them. This crisis offered us a unique opportunity to rethink education and focus on what is most beneficial for our children in the long run.

References


Ubuntu

Loy Wee Mee
Founder/Managing Director
Pre-school By-The-Park

It seems like such a simple word to utter but to those of us who know it, Ubuntu is packed with so much meaning, and layers transformational power. “Ubuntu” is a South African word and simply put, it means “I am because we are.” The concept originated from an anthropologist’s game with a tribe of African children. Baskets of sweets were placed near a tree a few meters away from the children. Whoever reached the tree first would get all the sweets. When he counted down and the game began, the children held hands and ran towards the tree together. When asked why they did so, the children answered “ubuntu – how can one of us be happy if all the others are sad?”

In the sweetly succinct words of Archbishop Desmond Tutu, human rights activist and a Nobel Peace prize winner:

“Africans have a thing called Ubuntu. It is about the essence of being human, it is part of the gift that Africa will give the world. It embraces hospitality, caring about others, being willing to go the extra mile for the sake of another. We believe that a person is a person through other persons, that my humanity is caught up, and inextricably bound up with yours. The solitary human being is a contradiction in terms. Therefore, you seek to work for the common good because your humanity comes into its own in the community, in belonging.” – Archbishop Desmond Tutu

This theme is not foreign at By-The-Park. Our purpose of being, to make a difference so that lives are enriched, is a core in By-The-Park. How do we live this? Through a very BASIC way aligned to Ubuntu’s spirit: We believe in potentials. We acknowledge and affirm efforts. We support and inspire each other to create possibilities in each of us. Ubuntu was richly discussed in 2018 leading up to our 20th year anniversary the following year. Since then, each year Ubuntu is our children’s core topic for discussion that spans over 6 months of deep exploration.

Teachers’ Ubuntu
Our Ubuntu journey started back in 2016, when we started stirring deep conversations about our vision, mission and core values. Simon Sinek’s “Start with Why” resonated with us and we went on a journey to discover our Why. We deep dived into the purpose of our being. It was an emotional day as we recounted the stories of By-The-Park’s impact beyond just programme delivery.
Our teams discussed how we felt about being part of By-The-Park and what shaped our experiences. Slowly but surely, a common thread surfaced; our purpose went beyond just being a quality preschool, it was deeper than that. Through big or small actions and efforts, we made a difference. We enriched those who journeyed with us. By-The-Park existed to do that, it was a very simple yet powerful purpose.

Ubuntu was made alive in our teachers, where simple activities during team meetings were planned to encourage teachers to connect. Here’s an example of such activity: with a ball of yarn in hand, we asked a team member to articulate how they felt about being in the team. At the end of the sharing, she will end it with “Ubuntu, I am because we are”. The ball of yarn was then thrown to another person and the sharing continued, until everyone had a chance to share. At the end of it, an intricate web formed, visually illustrating that everyone was connected – in one way or another, our actions are intertwined. Who I am is made up of the people around me. At By-The-Park, I am because we are, Ubuntu.

Children’s Ubuntu
When purpose and deep understanding of Ubuntu was entrenched in our teams, we introduced the story of Ubuntu to our children. We invited them into the conversation on what Ubuntu means to them.

“Ubuntu means we work together to move forward (to Sentosa)” - Alana Loh, K2.

Here it shows that children grasp the concept of teamwork and collective positive energy. Through more stories, children discussed values such as kindness, empathy, respect or simply being a friend to each other. Children-led conversations and role playing were also some ways we used to explore these concepts. Through these, children discovered ways to show kindness, appreciation and love to those around them and in turn inspire each other to be bucket fillers.
We observed a powerful forming of children’s language, thinking, actions and values cementing life-long foundations. From these learnings, our children rise up as Ubuntu advocates, bringing the message home. In a particular incident, a parent went out of his way to help our preschool, and when I expressed my heartfelt gratitude, his reply was simply: “You taught my child Ubuntu, my child came home to show us Ubuntu, now I’m only doing my part to continue the spirit of Ubuntu”. Never under-estimate our little advocates.

**Living Ubuntu in our community**

At By-The-Park, we believe in being community oriented. To make a difference, enrich lives, one person at a time, we seek to enrich the community around us. Since 2013, we have partnered with St John’s Home for the Aged as our community partner. Over the years, the relationship has flourished. It is not merely visits to the Home but a strong bilateral programme of exchanges was developed. By-The-Park adopted a small garden plot at their premise, where our children and families take up the responsibility of caring for it, working alongside the residents. The seniors also enjoy planned day-outs to our centres to oversee and nurture By-The-Park’s gardening plot with our children.

Even COVID-19 could not stop our projects and purpose. Throughout the period, we remained in contact with the Home to understand the well-being of the residents. Learning that their morale and engagement was dipping, our teachers embarked on a project, “The Moon Project”, to send messages of support and love to the residents. The project gave the residents something to look forward to each week as we exchanged the art pieces. Subconsciously, it gave them a reason, hope and comfort knowing that they played a significant part to complete the art piece. These unique art pieces are displayed at each school and at St John’s Home. The cycle of support through Ubuntu gives into the community and in turn the individual, a communal will to move mountains and find ways to triumph together. This is what represents the strength and synergy that anchors By-The-Park.

**Conclusion**

Driven by our purpose to make a difference, Ubuntu echoes throughout By-The-Park’s framing, programming, conversations, decision making and thinking from the youngest to the oldest. From a concentric circle starting with our teachers to children to families,
then to the community Ubuntu has opened our doors to sectoral colleagues. We have held workshops and conversations with leaders and teachers from local and overseas institutions to share our practices and beliefs. We advocate for these open sectoral sharing as it will eventually benefit Early Childhood locally and internationally. It starts from us.

Ubuntu, we wish you many meaningful connections as you discover your purpose.
The Benefits of Using Picture Books for Building Literacy Skills

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The Importance of Picture Books
When planning for early literacy development, oracy is one of the forgotten aspects of the curriculum. Oral language serves as a bridge to fluency in reading and writing, thinking and learning. Oracy and literacy go hand in hand in the communication process with all human beings. According to Hall (1987) oracy and literacy are the essence of social interaction and they play both meaningful and purposeful roles in all communication functions (p. 12). Reading picture books to children will arm children with oracy skills as they will be able to have access to sounds, stories, ideas and vocabulary. Egan (1993) states that children depend heavily on their spoken words to communicate their thoughts before they start to read and write (p. 121).

The understanding and the benefit of oral language research is a gateway to transit from orality to literacy. Reading picture books will give children the opportunity to build language skills when they have literate conversation with the reader. Literacy could not be instilled into the child’s mind without oral language and this is because oral language is the basic support for literacy and once this is taken out, language becomes not meaningful (Egan, 1993). Sawyer and Sawyer (1993) emphasized that speaking ability, listening ability, sign language and other forms of communication must therefore be included as important literacy skills.

When parents and teachers read picture books to children, they will have intimate conversations with the characters in stories. These daily conversations will tap into each other’s thoughts and ideas leading to further discussion on the words used in the book and at the same time it will demonstrate how good readers learn to make meaning of the words used in the book. Stories give children a meaningful and natural context for them to understand language. Listening to the vocabulary used in the stories frequently and repeating it will help in their language learning process. Repeating the determined words used in the stories is an important element in this process. When learners hear the objective words and structures in the language as many times as possible, the language starts to become internalised.

There are various ways in which picture book can be used in the classroom. It will encourage children to listen to the stories told in class and give them opportunities to actively analyse the stories. This in turn will improve their verbal skills, increase imagination and visualisation skills. Picture books can also be used as co-teachers
because it can create a platform for oracy and literacy. I feel that it has an essential role in the education of young children, as it will enhance their imagination and inspire them to create their own visual images and ideas. To further enhance children’s literacy skills, I use picture books in thinking-aloud activities. The fundamental idea behind the thinking-aloud process is to encourage children to use their internal dialogue, which is a crucial process of what good readers should do (Allington, 2001). Thinking aloud process also helps children who are second language learners, especially during reading aloud time.

Choosing picture books is a fundamental process. It is especially useful for second language learners in the class. Books such as fairy tales, fables and myths also help as children from diverse cultures can relate to such stories to make connections and reduce their anxiety about learning a new language. For example, when second language learners listen to any stories, they will expand their schema (pre-existing knowledge). Teaching students to make connections as they read, helps them to see the power of thinking about their own schema or background. They learn that connecting their background and experiences to what they read allows them to better understand the material (Harvey and Goudvis, 2000). The thinking aloud process helps children to monitor their comprehension as they listen to stories (Block & Pressley, 2002). When children practise thinking aloud after storytelling, they will start the process of inner conversation about meaning and thus comprehension of the stories become clear. Thinking aloud makes this process observable and still, some students do have difficulty figuring it out; they passively read not expecting the text to make sense.

Reading picture books will build visual skills. Many researchers have proven that when students create images in their minds before and after reading, their reading comprehension skills will improve as being read to. An active reader will actively engage with the stories and will not take in print and receive words off the page (Braunger & Lewis, 1998). When stories are being shared to children, they will use their metacognitive thinking skills, activate their background knowledge, use inferencing skills while listening and reading and use their sensory images to synthesise the stories (Keene & Zimmermann, 2002). Thus visualization is another important comprehension strategy to enhance comprehension skills. “Creating visual images when reading affects comprehension” (Hibbing and Rankin-Erickson, 2003 p. 761 2003). Allan Paivio (1971) came up with a “dual coding” theory that suggests the verbal and non-verbal systems is another way to represent events in a story.

**Which books can we choose?**

While research is clear about the usefulness of picture books in developing oracy and ultimately bridging the gap between reading and metacognition, as teachers, we often wonder if there are books beyond the ‘tried and tested’, beyond the well-known authors
who have supported us in our teaching practice, to an endeavour of exploring newly published books, of turning that crisp, fresh-from-the-oven book and of sharing that joy and excitement with our students. With this idea, here are a few short reviews of recently published picture-books with suggested activities that can be implemented in preschool.

**My Very Favorite Book In The Whole Wide World**  
Author: Malcolm Mitchell  
Illustrator: Michael Robertson  
Date of Publication: December 2020

"My Very Favorite Book In The Whole Wide World" is written by Super Bowl Champion and literacy advocate Malcolm Mitchell. The main character, Henley, talks about the struggle he had to go through as a reader. As part of a school assignment, his teacher had asked him to search for his favourite book. He panicked and decided to travel to places like the library and bookstores. The person that came to his rescue was his mum – “The best stories always come from the heart.” Henley then writes his own book and shares it with the class with confidence. This is a book that shows once again, that oral and written language is learned best through talking, reading and writing.

Suggested activity:  
Children can be asked to design the cover of one of their favourite books that they have read. While 5-year olds will prefer just drawing the cover, 6-year olds can be nudged to write a few lines about their favourite book.
Speak Up, Molly Lou Melon
Author: Patty Lovell
Illustrator: David Catrow
Date of Publication: September 2020

This book is about speaking up for what is right and speaking up for those who need help. When Bettina Bonklehead arrived in the classroom showing signs of bullying, Molly Lou Melon used all her exuberant energy in a positive way. She worked with Bettina in a class project and didn’t let Bettina’s previous actions ruin their relationship. Molly kept her positive attitude and continued to inspire her friends to do good. She took the lessons she had learned from her mum – “Take responsibility for the things that you do, good or bad,” and “Accept people for who they are and listen to their ideas, even if they are different from yours.” Young children have an innate sense of justice and this book will resonate with the Molly Lou Melons in any preschool or kindergarten.

Suggested activity:
4-year olds could be asked to share an incident when they listened to the views of others even when it was different from theirs, or when they stood up to help someone else. 5-year olds could be encouraged to draw a picture in addition to sharing orally while 6-year olds would also write a couple of lines in addition to a discussion on the topic.

Lotte’s Magical Paper Puppets: The Woman Behind The First Animated Feature Film
Author: Brooke Hartman
Illustrator: Kathryn Carr
Date of publication: October 2020

This picture book is about Lotte Reiniger, who created one of the first feature-length animated films: The Adventures of Prince Achmed. She was a feminist artist who refused to follow through to Nazi oppression rule and she bravely left her home in Germany, moving around for years. This book has a fairytale-like quality, hidden among the pages. Lotte brought many beloved fairytales to life using silhouette puppetry. Almost every
A child is drawn towards animated films. This book opens up a world of imagination for children.

Suggested activity:
Children can draw a silhouette on black paper and cut it out to make paper puppets. They can stage a puppet show, linking reading and oracy.

**Eyes That Kiss In The Corners**  
Date of publication: January 2021  
Author: Joanna Ho  
Illustrator: Dung Ho

This book celebrates the beauty of an Asian girl’s eyes and highlights the importance of recognising an individual’s beauty, respecting family beliefs and culture. The words on each page exude positivity and puts the spotlight on how the family members teach the offspring to practice self-love. This book is one that many children in Singapore will identify with. Dung Ho’s illustrations are captivating as they complement Joanna Ho’s figurative language well.

Suggested activity:  
The teacher could initiate discussion on physical features unique to children in the class and celebrate our differences.

**Everyday Ninja**  
Date of publication: February 2020  
Author: Leila Boukarim  
Illustrator: Barbara Moxham

What comes to your mind when you hear the word ‘ninja’?

These are phrases and words from my students - black masked figures, acrobatic moves, Katana steel blade, ninja stars… the list goes on. During the medieval times, martial arts was ruled and dominated by men. These sports have the reputation of showcasing traits of masculinity e.g. strength, aggression, toughness. I am so glad Leila Boukarim and Barbara Moxham have created such a lovely book that teaches young children about breaking gender stereotypes. It all started when Kareem and Wei spotted a ninja side-kicking, backflipping, somersaulting at the park. They were so impressed by the movements that they started to practise to move their bodies...
following the Ninja movements. But when the ninja did a perfect arabesque, the boys were intrigued and were taken aback that the Ninja was a girl.

We are witnessing true activism of race and gender right now and this simple and yet powerful story is an invitation for all of us to commit in identifying gender bias that still exist around us. In other words, teachers and parents play an important role in creating such awareness. Why create this awareness in young children? Being an early childhood educator for two decades, my experience has taught me that young children learn about the world and they wonder. It will not take them long to learn that race and gender matter. They make observations and form judgements based on things they can see. They learn very quickly about aspects valued by society, especially race and gender. Adults incidentally tend to and label activities as either “boy” or “girl” over and over again throughout the day. On a positive note, we are living in the 21st century and the bravery of many educators, parents and authors for persistently trying to highlight the realities of gender bias and rigid gender roles among young people, calls for a celebration. This book is a must-read!

Suggested activity:
Provide ‘toilet rolls’, markers, paint and coloured straw to children for them to make a ninja. Initiate discussion with them on their choice of colour, expression of the ninja and the colour of the ninja’s belt, to connect art and oral skills.

Children’s Literature Cited:


**References**


Candy Makes New Friends
Candy is a Good Helper

Written by Bessie Chua and Linda Yan
Illustrated by Patrick Yee
Published by Loving Books

Reviewed by
Mabel Wee
FLAiR Advocate

Loving Books publisher has created beautiful works for a more loving world. Local writers Bessie Chua and Linda Yan have dedicated 2 books, ‘Candy Makes New Friends’ and ‘Candy is a Good Helper’ to delight young children. These books focus on animals and have familiar settings that are close to children’s heart.

‘Candy Makes New Friends’ takes children outdoors to guess who they will meet. The authors sustain children’s interests by putting ‘flap covers’ to hide different animals. Curiosity is stirred when they have to guess who is in the pond, on top of the tree, behind the big stone or among the flowers? Children’s sense of wonder and element of surprise unfold as they discover the different animals and their sounds: Della Duck quacks or Suzy Squirrel squeaks. Animal sounds and their repeated movements invite children to echo and read along with the teacher. Extended and incidental learning is promoted as readers listen to similar beginning sounds in the names of animals and learn familiar prepositions on every page.

Every day experiences like going to the park and making friends are important moments for children. Undoubtedly, humour is evident in the play of language through tongue twisters such as ‘Tina Turtle tip-toe.’ The easy rhythm, repetition and fun with sound and movement words make reading a pleasure.
'Candy is a Good Helper' has a home setting where Candy demonstrates her big sister duties by taking care of her three baby brothers, Brownie, Dot and Stripes. The actions that follow demonstrate how helpful and caring Candy is: preparing milk, giving a bath, keeping the toys. Our young readers are encouraged to showcase their ability to ‘tell bedtime stories’ and ‘sing the little ones to sleep’. As an expansion to the story, children can take the role of Candy and tell stories to her little brothers. Alliteration and rhyming sounds are evident in many pages as in ‘splish, splash, splosh’ when children are bathing and ‘clink clank clonk’ when they keep their toys. Children can join in and be active participants in the story reading. This little story promotes helpfulness and responsibility in doing caring deeds at home. Rich sharing through conversations can spring from this story as children tell of their own home and relationship experiences.

Patrick Yee, the illustrator has once again shown his award-winning talents in coming up with a loveable and heart-warming character in Candy. Colourful characters and background scenes enable children to focus and understand the flow of the story. The flaps are sturdy, well-designed and so appealing to young readers who just want to reach out to open and discover what are under the flaps. Patrick has used a combination of techniques such as collage, printing and water colours to bring out the child-like characters and the world they live in.

The message of both books is set in rhyme in a light hearted way as Candy cares for friends and the well-being of her baby brothers. The simple text and the picture-text integration will help early readers take their first steps into the joys of reading.

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