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## Dr Ng Ee Lynn

Senior Education Research Scientist  
Centre for Research in Child Development  
Office of Education Research  
National Institute of Education

Early childhood education (ECE) plays an important role in setting the foundation for learning. International research has shown that high-quality ECE positively impacts the development of early numeracy, language, socio-emotional and executive functioning skills, thus contributing to improved school readiness. Longer-term effects of high-quality ECE have been found in the domains of academic achievement, life satisfaction, as well as physical and mental well-being.

In this issue of *SingTeach*, early childhood professionals and researchers share their views about the benefits of ECE and early intervention, as well as research areas that merit more attention in the Singapore

context. This issue also features several NIE research projects that investigate topics pertaining to ECE, including Mother Tongue language learning using multimedia technology, understanding the meaning of number words and learning how to count, and a longitudinal study exploring the long-term effects of early childhood skills attainment on children's development in middle childhood. Key themes that emerge from these articles are the importance of parental and community involvement in our children's educational journey and supporting early childhood educators in their work.

As a researcher and parent, I am encouraged to know that there are many individuals out there who are genuinely passionate about ECE, be it in terms of educating and guiding our youngest citizens or conducting research to understand how learning occurs and identifying factors that contribute to better learning. I am confident that our collective efforts will contribute to further improving the quality of ECE in Singapore! ■



### ONLINE EXCLUSIVE

## Research in Action

Understanding Child Outcomes from Early to Middle Childhood



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# EARLY CHILDHOOD EDUCATION IS A



**The emotional, social and physical development of young children provides the building blocks for educational achievement, responsible citizenship and lifelong health, just to name a few. A child's early years are crucial for his or her overall development, both in the short- and long-term. Guest editor of this *SingTeach* issue Dr Ng Ee Lynn, Senior Education Research Scientist from the Centre for Research in Child Development at NIE, shares with us more on the different areas of impact that early childhood education has on young children and the person they will become.**

## **Early Education in Singapore**

In the past, one common misconception of early childhood education (ECE) was that it is only about learning basic academic skills such as reading and writing when in fact, it is more than just that, going even beyond preparation for primary school.

"It is heartening to see now that this misconception is slowly eradicating because over the years, more and more attention is being placed on early education and the important role it plays in a child's development," Ee Lynn, whose research interests centres around learning and development in early and middle childhood, says.

Minister of State for Social and Family Development Ms Sun Xueling also shared earlier this year at the Early Childhood Development Agency annual appointment ceremony that Singapore has spent more than \$13 million dollars in the past 6 years to train early childhood educators (Teng, 2022). This

## Four Important Areas of Early Childhood Development



Cognitive



Social and Emotional



Communication  
(Speech and Language)



Fine and Gross  
Motor Skills

of early education,” Ee Lynn shares. She also adds that there are four important areas of early childhood development: cognitive, social and emotional, communication (speech and language), and fine and gross motor skills. These skills contribute to improved school readiness skills in the short-term, and better cognitive, physical, and socio-emotional well-being in the long-term.

During the early childhood years, children are capable of absorbing information around them and learning multiple new things simultaneously; they are constantly processing and making sense of new experiences.

“Exposing children to high-quality early education helps to support their cognitive, language and motor skills, as well as their social and emotional skills,” Ee Lynn explains. “As children transition from preschool to primary school, their social and emotional skills, such as impulse control and awareness of other people’s feelings, help them play and learn effectively in more formal group settings.”

However, for children to be able to develop social and emotional skills, it is also crucial that they can communicate with others effectively. Language skills help children communicate what they want and what they feel to others. As such, early language development becomes crucial to children’s ability to form social relationships and connect with others.

“The first 3 years when the brain is developing is the most crucial period for acquiring speech and language skills,” Ee Lynn shares. “A high-quality early childhood classroom supports language development by providing an emotionally supportive and cognitively stimulating environment. Moreover, if a school has a bilingual programme, children will also be exposed to how the sounds within different languages work together.”

However, for a child to truly benefit from ECE, quality preschool education is only one part of the equation. The other part is parent involvement.

indicates that developing the quality and profession of ECE in Singapore has been a priority for the nation.

“Early childhood educators play an essential role in providing stimulating and high-quality learning environments that support optimal child development,” Ee Lynn explains. “One of the key features of a high-quality learning environment is high-quality teacher-child interactions, which include creating a sensitive and warm learning environment that supports and maximizes children’s learning and classroom engagement.”

If the importance of ECE is more than we thought, this then brings us to the next question: How exactly does it benefit children in their overall development?

### Four Areas of Early Development

“Although it is not compulsory for children to attend preschool in Singapore, an increasing number of parents now acknowledge and understand the benefits



## The Power of Parent Involvement

“When parents are involved in their child’s ECE, they are more in tune with what is happening in their child’s preschool and have a better chance of establishing a connection between what’s learned at school and what happens at home,” Ee Lynn says. This home-school partnership is a crucial element in a child’s development and supports further learning.

However, one of the most challenging problems for many early childhood educators is in identifying the most effective way to better engage parents in their child’s learning. “One way to address this challenge is to establish good lines of communication between the preschool and parents,” Ee Lynn shares.

Also, to a large degree, community involvement is beneficial for children in the longer-term as it gives them a sense of belonging especially because they grow in the context of their community.

“As they interact within their smaller community environments such as an art class for example, they begin to get a sense of what the larger society is like. They learn to understand how their actions affect others, and what values and sensitivities the community shares,” Ee Lynn adds. The creation of a local community in early childhood becomes the supportive, positive, uplifting foundation of a child’s life.

## Research in Early Childhood Educators’ Well-Being

As Singapore continues to build on efforts to develop the quality and profession of ECE, it becomes increasingly important that educators’ well-being is also considered.

“There has also been research that shows that poor physical, psychological and workplace well-being hampers early childhood educators’ ability to create and sustain high-quality learning environments,” Ee Lynn shares. “Several studies have reported negative relationships between educator stress/emotional exhaustion, and the quality of emotional and instructional support provided in the classroom.”

According to Ee Lynn, highly stressed teachers are susceptible to having conflictual interactions with

their students, are less likely to establish supportive relationships with them, and more likely to use more reactive and punitive classroom management strategies. Emotionally exhausted teachers may also lack the motivation or energy to engage in preparation for daily instructional activities, which compromises the quality and rigor of the learning experiences they provide in the classroom. Consequently, the classroom climate is not conducive for meeting students’ learning and emotional needs.

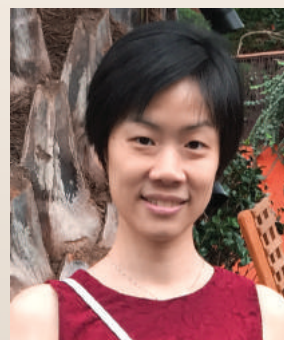
“Consistent with this line of reasoning, several studies have reported strong connections between early childhood educator stress and child outcomes, including poorer social skills, poorer socio-emotional functioning, lower child engagement with adults, peers, and materials as well as higher instances of behavioural problems,” she adds. “Empirical findings clearly indicate that poor educator well-being has an adverse impact on children under the educators’ care and the educators themselves. International scholars and researchers are currently advocating for incorporating early childhood educators’ well-being as a crucial and essential element in creating and maintaining a high quality ECE system.”

As Singapore continues to strive toward raising the quality of ECE, Ee Lynn hopes that one day, there would be a focused national research agenda to clarify the state of early childhood educators’ well-being in Singapore, the factors that contribute to their well-being and the relationship between educators’ well-being and child outcomes. ■

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### ABOUT THE GUEST EDITOR



*Ng Ee Lynn is Senior Education Research Scientist with the Centre for Research in Child Development at the Office of Education Research, NIE. Her research interests are centred around learning and development in early and middle childhood. Specifically, her work focuses on understanding how factors that are internal and external to the child contribute to learning and development. Her current work focuses on children’s self-regulation skills and early childhood educator well-being.*

# UNDERSTANDING NUMBERS at a Young Age

What does it mean to children when they learn number words such as one to 10? What is the extent of their understanding of the meaning behind those words? At which stage of learning do they begin to understand the association of number words to its actual quantity? Dr Pierina Cheung, Education Research Scientist from the Centre for Research in Child Development at NIE, shares with us her research study that aims to explore the answers to these questions as well as to identify the factors that may facilitate children's numeracy learning process.

## Number Words: What About Them?

Over the last 15 years, Pierina has conducted extensive research in early childhood education in the United States, Canada and Singapore, with a large portion of it dedicated to numeracy development in children.

In her most recently concluded NIE research study titled "Improving Early Number Word Learning: Examining the Role of Input", she sought to find out how children understand the meaning of number words, the factors that might predict their understanding, as well as ways that teachers could use to help children attain that understanding.

Young children can often start counting from one to five or six. "However, this does not necessarily mean they understand the meaning behind those number words," Pierina shares. "To learn counting, children have to learn the procedures and also how counting relates to the meaning of number words. The procedural aspects refer to the regurgitation of number words and the tagging of objects with number

words. Children can perform the procedures without actually understanding what counting means."

This inspired Pierina to explore at a deeper level when and how children start to learn the meaning of counting. To do so, her research study integrates various games with instructional tasks for children aged two to four.

"What we found interesting was that when children learn number words with objects as reference, they develop a learning pattern where they learn the first few numbers (one to four) individually. Subsequently, they figure out the rest of the number words up to 10 to some extent," Pierina explains. "There seems to be a shift after learning four, and it also takes around 1 to 3 years for them to fully understand the meaning of number words."

two = 🍏🍏

seven = ★★☆☆☆

five = 🎵🎵🎵🎵🎵

## Helping Children Understand Meaning

Pierina shares that it is common for young children to give inconsistent results when asked to give a particular quantity. For example, when asked to feed a puppet two bananas, they may sometimes give two, three or even four.

“This shows that they do not have a stable understanding of number words yet, and we try to train these children on individual numbers in a chronological order to help them realize their meaning,” Pierina explains. In her study, she showed young children different groups of objects that differ on various physical properties such as colour, size and shape. For example, to help children learn three, they showed them three purple buttons, three green buttons, three orange toy houses and so on.

“The use of different examples helps children learn number word meanings,” Pierina shares. “Teachers can also apply this at school. The classroom is full of interesting objects. They can use whatever they have around them to create fun, meaningful counting contexts for their children. Sometimes, providing enriched input in a preschool classroom is about opening your eyes to see what is available around

**Below are two tips from NIE Education Research Scientist Dr Pierina Cheung for preschool teachers to use in classrooms that can help children understand the meaning of numbers:**

1. **As opposed to asking children how many objects there are in a set (this encourages procedural counting), flip the question and ask them to give you an x number of objects instead (this encourages meaningful counting).**
2. **Make counting activities fun and engaging for children by being more interactive using real-life objects in addition to printed pictures.**



“Bring  
me three  
duckies!”

you, making observations, and providing immediate feedback.”

Due to the varying levels of understanding of number words among children within a class, Pierina stresses that it becomes important for teachers to recognize and acknowledge the individual differences so they can tailor to each child’s learning pace.

## Challenging Yet Fulfilling

“Studying young children is not an easy task. You can’t always ask them what they think and their attention span is relatively short, so as researchers, we really need to be creative with how we present the materials to get at what they think about the world,” Pierina explains.

However, as challenging as it is, it is also the most fulfilling aspect of her research. “What’s more exciting and rewarding than understanding how learning unfolds in development and sharing that knowledge with teachers and parents?”

Sharing research findings with preschool teachers can be challenging, Pierina adds. “Teachers may not know the distinction between learning counting procedures and the meaning of counting, but over time, as we hear more about what they experience in the classroom, we are better at helping them connect their own observations with research findings. Now when I share research on counting, I often see the light bulb goes on in their eyes.”

Despite being in the field for 15 years, Pierina shares that there are a lot more questions to be asked, findings to be discovered, as well as other variables to deep dive into such as bilingual number learning, the relationship between language and number, and shared book reading in numeracy.

Unlike number words, young children learn other types of words such as words for objects, people, properties of things, or actions at a much quicker pace. Children pick up nouns easier because they have a clear reference.

“You can see and touch a car or a ball, and you can see properties such as big or yellow. Numbers are an abstract concept like time,” Pierina explains. “However, one can still infer time from perceptual features such as the brightness or darkness of the day. Numbers don’t have that type of perceptual cue. That’s one reason why it takes children so much longer to learn numbers than other types of words.” ■



# Number Talk in the Classroom

Due to COVID-19, Pierina and the research assistant for the project, Daphne Ang, had to adjust the study procedures to create a contactless environment for teachers to collect classroom data in relation to number talk. They provided number books for teachers—one with a storyline (narrative) and another without (non-narrative)—and teachers recorded their book reading sessions for coding and analysis.

“We wanted to see how preschool teachers use numbers in the classroom and so we gave them some books to elicit number talk,” Pierina explains. “We hypothesized three possible outcomes: 1) teachers engage in more number talk when reading the narrative book; 2) they engage in more number talk when reading the non-narrative book; or 3) no difference because the two books are matched in number content.”

They found that teachers engaged in more number talk when reading a non-narrative book. “Non-narrative books do not have a storyline, so teachers may have more opportunity to use number talk to explain the content of the book,” Pierina clarifies.

However, they also looked at aspects other than the quantity of number talk. “The engagement between teachers and children is imperative as well and it cannot be captured by just counting the number of times a teacher talks about numbers,” Pierina adds. “When Daphne conducted a secondary analysis of the data, she found that teachers were better at linking numeracy with other domains such as socio-emotional learning when reading the narrative book.”

“In the narrative book, a little lion cub was looking for friends. In the end, he ended up with a lot of friends so there was a happy ending but at the beginning, he was very lonely because he only had one friend,” Pierina explains. “The story allows teachers to connect a social concept such as loneliness with the number one, and having more friends with the number 10.” That provides a social context for number learning that is not found when teachers read the non-narrative book.

## Recommended Reads for Preschoolers

Below are some books available at the National Library Board (NLB) that can help children understand number words as recommended by Pierina and Daphne:

- *Ten Apples Up On Top* by Dr Seuss
- *Five Little Monkeys Jumping on the Bed* by Eileen Christelow
- *Ten Black Dots* by Donald Crews

Another highly recommended book that is not available at NLB is *Anno's Counting Book*. It is a wordless picture book that offers ample counting opportunities and works for any language. To view a video of the book, scan the QR code.



## ABOUT THE INTERVIEWEE



Pierina Cheung is Education Research Scientist with the Centre for Research in Child Development at the National Institute of Education (NIE), Singapore. She is Principal Investigator of a research project titled “Improving Early Number Word Learning: Examining the Role of Input”, funded under the Education Research Funding Programme managed by the Office of Education Research at NIE.

வணக்கம்

apa khabar?

您好

# Laying the Foundation for **INNOVATIVE** Mother Tongue Education

**How can preschools support the learning of mother tongue languages when they are now being spoken less at home? How can parents inculcate simple daily habits in their lifestyle that will expose their children to their mother tongue? Director of Mother Tongue Language Curriculum and Professional Development at NTUC First Campus, Dr Connie Lum, shares her insights.**

Dr Connie Lum was involved in a project that examined the efficacy of a popular Mandarin eBook app among preschool children in Singapore. The project, helmed by Dr Sun He, Education Research Scientist from NIE, was carried out during the COVID-19 pandemic.

Reflecting on the experience, Connie says that even though there were challenges caused by school closures and less face-to-face learning, it provided a golden opportunity for parents and young learners to be more exposed to using eBooks for reading and learning at home.

“The experience has made preschool educators and parents realize how multimedia technology that incorporates multimodal features such as text, animations, illustrations and songs, can actually help children in learning their mother tongue,” she points out.

## Multimodal Learning in the Classroom

There has been more awareness in early childhood education (ECE) of the benefits of multimodal learning. Studies have shown that when our senses such as visual, auditory and kinesthetic are being simultaneously engaged during learning, we can understand and remember more.

Connie strongly supports using multimodal approaches in the classroom to enhance literacy and develop oracy among preschoolers. She notes that with more children coming from English-speaking households, it is imperative for teachers to teach mother tongue languages in innovative and engaging ways.

She gives an example of how her team at NTUC First Campus (NFC) have translated a well-known picture book titled *Brown Bear, Brown Bear, What Do You See?* into a video.

“Instead of having a teacher read out the story as students quietly listen, the teacher will play a video of the story which is re-told in Mandarin. The video is rich with illustrations, animations, and catchy tunes that the children can sing along to,” she explains. “Not only that, the children have the freedom to move their body along with the music too.”

She emphasizes that actions such as singing and repeating of words as well as engaging in make-believe activities form parts of play, which is an important part in children’s academic learning.

“We should not underestimate the aspect of ‘fun’ in ECE. It is when children are having the most fun that they can learn the most and retain new knowledge,” she says. NFC’s classrooms also have various hands-on and multisensory activities such as finger puppetry during mother tongue lessons.

## Using Mother Tongue Language Daily

To nurture young children’s confidence and fluency in their second language, it is important to make the language relevant and applicable to their lives.

“In our classrooms, teachers converse in Mandarin not only during lessons but also during transitional periods such as lunch and bathing hours. During lunch time, for example, teachers will introduce the names of foods and fruits to the students in Mandarin,” she shares.

“Hopefully, they can apply what they have learnt in the classroom to their daily lives, for example, ordering chicken rice in hawker centres or even buying fruits in wet markets using Mandarin,” she adds.

Connie and her team have also written and published Chinese language books. These books are set in the local context, with words, dialogues and scenes that preschoolers can relate to in Singapore. “The books are themed around Singapore festivals such as National Day, Chinese New Year and Hari Raya Puasa. Apart from enhancing their literacy skills in Mandarin, the books can help them gain a deeper understanding of Singapore’s multicultural heritage,” she remarks.

### Tips for Parents

Connie reminds us that a child’s home environment and early exposure to the mother tongue language heavily influences how well the child learns and is able to speak the language. The best age to start exposing them to the second language is when they are young.

“It is actually during the infancy stage when they can easily pick up and speak their first words in the mother tongue language,” Connie explains. “The earlier you expose the child to the language, the easier it is for them to speak it.”

She advises parents not to focus too much on word recognition or using flashcards during the early years. “To cultivate a conducive environment that encourages mother tongue learning, parents can

practice simple daily habits such as reading aloud to their children bedtime storybooks in Mandarin or playing Chinese songs every day in the home or car,” she shares.

“Another thing that parents can do is to involve their children in cultural celebrations, such as the Dumpling Festival or Lantern Festival, and initiate discussion on the cultural significance behind these festivals. This way, children will be able to make positive associations between Chinese traditions and the language,” she adds.

### Future Hopes

Connie mentions that she has been working with local composers on creating new songs that children can sing along to. She notes that most books and videos used in local preschools to teach the Chinese language are currently imported from China and Taiwan.

“The best way that we can ensure our young students are able connect and engage with their learning materials is to set them within a local context,” she reiterates. “My hope for the next generation of preschool educators is that they will invest more time and effort in producing books and videos with local content.”

While the tried-and-tested ways of teaching do have a place in educating young learners, she also reminds teachers to augment those traditional modes of teaching in innovative, fun and engaging ways. ■

### ABOUT THE INTERVIEWEE



*Connie Lum is currently Director, Mother Tongue Languages of NTUC First Campus in Singapore. She has worked in the field of early childhood education for over 20 years and holds a doctorate in education. She works closely with school principals and teachers in delivering the Chinese curriculum and programmes to children through her involvement in curriculum writing, teacher training, evaluation of children’s learning environment and the continual review of curriculum tools and techniques. She is a member of the Committee to Promote Chinese Language Learning, Pre-school Chinese Language Education Support Group.*



# THE POWER OF EARLY INTERVENTION



**Research in early childhood has shown that the first few years of life—when the brains have the highest level of plasticity—is a critical development period in a child’s life. For some young children with needs, early identification of what these needs are can give them a greater chance of reaching their full potential. In this article, NIE expert on early intervention (EI) Assistant Professor Xie Huichao from the Psychology and Child & Human Development Academic Group at NIE sheds light on some commonly misunderstood views about EI and how it can benefit children in the longer-term.**

## How would you describe early intervention (EI) and what are some of the most common misconceptions about it?

EI refers to a discipline of professional services and supports for children from birth to eight years of age with or at risk of developmental delays or disabilities, and their families.

One of the many common misconceptions about EI is that most people tend to view children with severe physical impairment or very strange behaviours as the only target population. In fact, most of the children receiving EI services in Singapore or any other developed countries look just like any other child. This is because many people have adopted the stereotypes of children with delays or disabilities. Typical development and atypical development are on one continuous spectrum of child development and the line in between is artificial and ambiguous.

Another common myth is that EI programmes for children need a completely different set of instructional strategies from non-EI programmes. In reality, almost all EI practices are also effective in teaching children who are not recipients of EI.

In the history of early childhood education (ECE), for example, one of the pioneers Maria Montessori first

applied her pedagogies and curriculum to children with or at risk of disabilities. Given its effectiveness in teaching children—regardless of whether they have disabilities or not—the famous Montessori preschool model was eventually birthed. Today, this model is used in many preschools around the world.

## How can we encourage a more open-minded and receptive view towards disabilities?

It would be best if the teacher training system in Singapore is reviewed and improved to ensure all Singapore school professionals are trained to support students’ learning of human diversity.

From early childhood to tertiary education, students’ learning of human diversity could be implemented. Learning about human diversity is not just about being a kind person, but to analyse differences among people in multiple dimensions such as language, culture, religion, values, beliefs, abilities, gender, race, body shape and more. The next generation of Singaporeans growing up with a more positive attitude towards diversity and critical thinking skills to understand the social construct of disability will be immune to these misconceptions.

Addressing misconceptions about disabilities requires efforts from society, not just teachers and schools. Employers and policymakers should review their employment practices and rules to first remove biases towards applicants with disabilities. The media should also do their part to represent people with disabilities in all movies, television programmes and other forms of products in a positive and empowering way.

## Why is EI critical and how does it benefit the child?

EI is critical because children’s brains have the highest level of plasticity in the earliest years of life. Research has informed us that investment in early childhood has the best return rates.

Early experiences affect the quality of that architecture by establishing either a sturdy or a fragile foundation



for all the learning, health and behaviour that follow. In the first few years of life, more than one million new neural connections are formed every second. After this period of rapid proliferation, connections are reduced through a process called pruning, so that brain circuits become more efficient. Sensory pathways like those for basic vision and hearing are the first to develop, followed by early language skills and higher cognitive functions.

The brain is most flexible, or “plastic”, early in life to accommodate a wide range of environments and interactions, but as the maturing brain becomes more specialized to assume more complex functions, it is less capable of reorganizing and adapting to new or unexpected challenges.

For example, by the first year, the parts of the brain that differentiate sounds are becoming specialized to the language the baby has been exposed to; at the same time, the brain is already starting to lose the ability to recognize different sounds found in other languages. Although the “windows” for language learning and other skills remain open, these brain circuits become increasingly difficult to alter over time. Early plasticity means it’s easier and more effective to influence a baby’s developing brain architecture than to rewire parts of its circuitry in the adult years.

### What are some key components of successful EI programmes?

Effective EI has an equation: evidence-based practice plus high fidelity in implementation equates to successful EI, yielding desired outcomes on the child and family. In this equation, the first ingredient is evidence-based practice, which refers to integrating the best available research evidence with family and professional wisdom and values.

High fidelity in implementation means the critical components of evidence-based practices have been implemented as intended to be and adaptations are appropriate. High fidelity is defined by that the critical components of evidence-based practices have been implemented as intended to be and adaptations are appropriate. For example, a professional who has a strong standing on no physical punishment may find it difficult to work with a family who spans their child.

Each family is the expert of their own child because of their wisdom pertaining to this specific child.

People in the family spend the most amount of time with the child and have the most knowledge about the child. Meanwhile, each family has their own values, priorities and beliefs about what the child needs to learn and how to learn. These values and expectations should be respected and addressed in the education and intervention for their child.

As professionals, educators possess the discipline-specific wisdom and knowledge. For ECE and intervention professionals, they are trained to have a systematic understanding of how children learn and develop. As these professionals gain more experience in the field, they should become more and more competent in applying their discipline knowledge to the specific cases of individual children and use their knowledge and wisdom to help each child and family. Professionals are also trained with professional ethics and values, while also bringing in their own personal values to practice.

### What area in research on EI do you think merit further attention?

An upcoming area for EI research is in implementation science. The EI literature has accumulated a large body of knowledge about what works in EI, say, evidence-based practices. But data shows a generally low application or utilization of evidence-based practices, which implementation science is aiming to address. ■



Scan the QR code to read more about the EI landscape in Singapore and how it can do better.

### ABOUT THE INTERVIEWEE



*Xie Huichao is Assistant Professor from the Psychology and Child & Human Development Academic Group at the National Institute of Education (NIE), Singapore. Her research focuses on evidence-based early childhood intervention and inclusion practices in Singapore and other Asian contexts.*

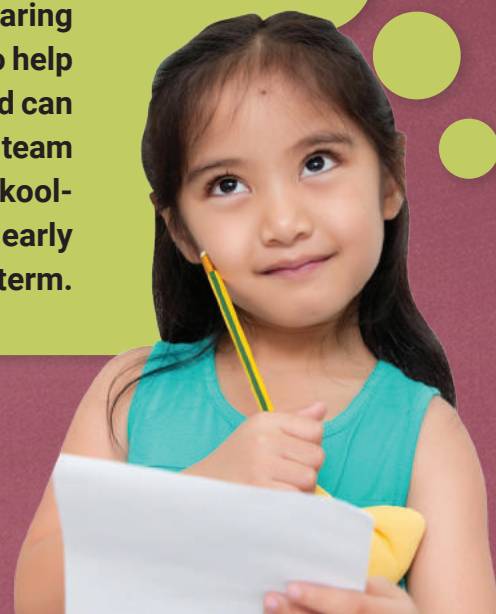


# Learning Early

## for *Better Learning*



Growing up, we are constantly confronted with many challenges and that is not an exception even for a child. As such, preparing young children and equipping them with the right skillsets to help them navigate challenges and future terrains are crucial and can begin as early as 3 months old. In this section, the *SingTeach* team speaks to a preschool leader and teacher from The Little Skool-House International (At-Kent-Vale) on the importance of early education and how it benefits young children in the longer-term.



**Dawn Hu**  
Principal

### What are the key benefits of early childhood education (ECE) for children's longer-term development?

Parents have shared several benefits of placing their child(ren) in ECE programmes. The ECE curriculum, which consists of several aspects including academic and social, helps children develop confidence to learn independently and acquire self-help skills. It also provides children with the opportunities to interact with their peers thus allowing them to learn, value and respect each other's uniqueness and diversities. These benefits contribute positively to the children's adaptation in different academic and social settings in their later development.

### Having been in the ECE sector for many years now, what are your thoughts about ECE in Singapore and which area(s) in ECE research do you think merit more attention?

The ECE sector has improved in leaps and bounds in the last 10 years. We have observed changes in different areas ranging from outdoor learning to supporting children with needs in which more emphasis is now given. There is also greater support and focus in providing educators with more resources and training to continue their professional development. As the current trends and issues are placing more awareness on mindfulness and resilience at the workplace settings, perhaps the focused area in ECE research can be on building children and families' emotional resilience. We do see the need to provide strategies and approaches that can help parents build their skills to better support their children at home.



A is for Apple

### What is one of the biggest challenges of being an ECE educator and what advice or tips would you have for new teachers?

One of the biggest challenges is having to balance work and personal life. As we serve young children, educators are constantly reflecting on their teaching and learning practices, and how to better support the children to reach their goals. For educators to hone skills requires years of experience and constant

understanding of current trends and issues, and at times, educators do feel the exhaustion. Sometimes, there is also the need to search for the right balance after work to wind down. For new teachers, it is always challenging for them, and it is pivotal to connect and collaborate with other educators to progressively transit to the next stage. This is also to ensure that there is a space to gather information and build a community of learners and determined teachers.



**Shirley Marie  
Laquindanum  
Camacho**

*Senior English  
Teacher*

### How does ECE facilitate children's transition to primary school?

In the centre I work in, we equip the children with the necessary skills (i.e., comprehend the concept of timetabling, taking care of one's own belongings, buying their own food from the canteen, knowing the concept of change [money], and preparing the family and child for the new environment) they need to be ready for primary school.

The curriculum is designed specifically to prepare every child to meet the curriculum expectations in primary level, starting from Playgroup all the way to Kindergarten level. We also place high emphasis on the ability to communicate, as we are aware that it plays an essential part of children's learning and development. When approaching a new setting or environment, they attain a greater sense of confidence which can help them develop their skills more and be able to communicate to others well. Teachers will plan for primary school visits, where they can experience classroom learning and buying food during lunch or tea break. Through exposure to field trips or excursions, the children are being exposed to a big school environment.

### How important is parental and community involvement in ECE and what are some ways we can encourage more of such involvement?

Parental and community involvement in ECE is important as it supports the entire learning process and development of the children. The children will also feel assured and trusting knowing that their parents, educators and community are here for them. Some ways that we can encourage more of such involvement are inviting community helpers into the centre to share about their job scope, encouraging the older age group of children to ask questions to find out more and fill their curiosity, planning and preparing take-home kits for children to bring home and work on with their parents.

### Is the focus of ECE largely on soft or hard skills, or both? Elaborate further.

ECE focuses on both soft and hard skills. In ECE, we embark on a holistic approach. We focus on all phases of the child's development—their academic preparedness, social and emotional development, and overall well-being of the child. As educators, we always remind parents that aside from hard skills, soft skills play a huge part in the children's continuity of care and healthy relationships in the future and parents do see the need to want to sharpen these skills for their children. ■

ease" and "Thank You"



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The Educator-Researcher Connect (or ER Connect) is a platform that aims to bridge researchers from the National Institute of Education (NIE), Singapore, and local teachers and school leaders in an effort to deepen, enhance and advance education research in Singapore. If you are interested to collaborate and be part of any NIE research project(s) listed in the ER Connect, based on your school's or your needs, please get in touch with the relevant Principal Investigator directly.

The list of research projects on the ER Connect page will be refreshed periodically. We encourage you to share about ER Connect with your fellow colleagues in your school. We hope that providing such information will serve to reduce the research-practice gap and inspire you to embark on an education research journey alongside NIE experts.

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