THE BING TIMES

BING NURSERY SCHOOL, STANFORD UNIVERSITY

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Director's Column: Our History Informs Our Future

By Jennifer Winters, Director



e welcome you back to the 2022–23 school year and look forward to building a vibrant Bing community. After two years of pandemic restrictions

that prevented parents from entering our building, we were so thrilled to be able to open to parents fully before the end of the last school year. The atrium was once again filled with the sights and sounds of children playing and parents and teachers connecting on a more personal level. This year our Harvest Moon Auction will be an in-person event, and we encourage parents and teachers to participate in helping make it a success.

In this period of renewal, we also received reaccreditation from the National Association for the Education of Young Children. The five-year certification recognizes that Bing Nursery School has maintained the highest quality and professionalism. In the months leading up to the review, teachers and our administrative team prepared extensive digital portfolios and examined all



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aspects of the program. For our staff, it was an opportunity to look deeply at our practice and mission and how they translate into our day-to-day work with children, families, Stanford undergraduates, researchers and educators.

For the past 57 years, Bing has provided an outstanding early childhood educational experience that is play-based and child-centered. We have been and always will be deeply committed to supporting children's growing sense of self as they explore and discover the world around them. We are also dedicated to serving as a living laboratory for research and teaching Stanford University undergraduate classes onsite by Bing administrators and head teachers.

Research and education have been part of Bing's mission since its founding. "Unless a nursery school is truly a good place for children, it cannot be a good place for student- or parent-learning or research," said founding director Edith Dowley. More importantly, a high-quality, play-based program; research; Stanford undergraduates and Bing parents all contribute to our understanding of child development. They also illustrate that young children learn best through play. For young children, play and learning are interchangeable; this has been a fundamental truth since our inception.

Three Founding Principles

As we look ahead, a look back at the school's original philosophy shows us the way forward.

The goal of *treating the child as an honored guest* has always been an integral

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part of our practice. At Bing, there is a deep respect for children and their ideas. We believe that it is imperative that teachers see things from a child's perspective and view every child as capable and competent. In the example below, teachers thoughtfully prepared a variety of tools and supplies, providing children with the freedom to create.

At the woodworking table one day, Charlize announced, "I'm going to make a snowflake! They are different." She gathered eight diamondshaped pieces of wood and arranged them to create her snowflake. She had discovered the design in previous weeks while deliberately making symmetrical configurations with the wood. After hammering her nails into the connectors, she admired her project. "There. ... Now I need white paint." A teacher helped her get the paint. Charlize returned to the

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woodworking table several times over three weeks to recreate and master her snowflake. She proudly assisted other children who wanted to make their own wooden snowflakes.





Dowley believed that children need uninterrupted time to fully immerse and engage in play. She fondly called this the gift of time because she believed that life had become hectic and wanted to give back to children what modern living had taken away. This founding principle remains a core part of Bing's philosophy, which is witnessed daily in children's deep sustained engagement in their chosen activities. Last spring, West AM teachers offered time and space for children to investigate eggs as a classroom project:

Imaginative play involving eggs was one of Johnny's favorite activities, and he soon became an expert on making his own eggs out of crumpled paper towels wrapped in several strips of masking tape. One spring morning, Johnny pretended to be a duck and jumped, flapped and quacked all around the sand. Teacher Lauren asked if he needed to make

a nest. After pausing to think, he raised his eyebrows and nodded. He looked around and decided upon the "tallest tire" for the best protected nest. He knew where to get paper towels and tape inside, then quickly returned to begin his family.

"I don't know if I should make four or 100 eggs. ... I think I'll just make four today. Maybe I'll save them and make more every day and eventually I'll have 100." As he carefully made his eggs, Kristina arrived, and Johnny updated Kristina on his game. "I'll help you make some eggs, Johnny," she said. "How many do you want?" Johnny adjusted his plan. "I think I want 10," he said. "So that means we have a lot of work to do."

They tracked their progress, updating each other on how many more eggs they needed, and Johnny carefully placed each egg into a divot in the nest. Johnny looked at Kristina, concerned. "Kristina, since you're the mama and I'm the daddy, we might want to go on vacation. We need some guards for this nest if we ever go away."

Lauren supplied them with a variety of toy animals, and Johnny selected a combination of nocturnal and diurnal animals so that the eggs would be guarded day and night, spacing them evenly around the nest. "There can't be any gaps," he explained.

Johnny and Kristina dutifully baked a cake in the sand kitchen for them. When Johnny realized it was too heavy to carry, he used a wheelbarrow to deliver the food for the babies, which were expected to hatch any minute.

Johnny then wondered how he could make ducklings for the next installment of his play. Lauren reminded him of the small origami creations he had already made, and Johnny confidently marched indoors. He returned several minutes later with

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exactly 10 tiny origami ducks, which he carefully placed beneath each egg.

By the morning's end, the ducklings had thoroughly enjoyed the food that he and Kristina had prepared, and several other children pitched in to protect the hatchlings. Afi generously dug a moat surrounding the guards, creating an additional obstacle for any potential threats.



Finally, supporting the child's *freedom* of movement allows children to move between indoor and outdoor environments and explore at their own pace. Dowley's original plan included ample space and a variety of terrains. Emerita Head Teacher Bonnie Chandler often said, "A child learns geography with his feet." Freedom of movement also benefits a young child's physical and cardiovascular development. Children's ability and motivation to run to the top of the hill, swing across the monkey bars or climb to the peak of a structure to view their world not only increases and supports their physical selves, it also helps strengthen children's brain development by engaging multiple senses and making synaptic connections. There is nothing quite so gratifying as hearing a child say, "I did it all by myself!" Bing's indoor and outdoor spaces allow children to move freely, as in the following examples:

In the neighborhood, there was a play invitation with gutters and

whiffle balls. The following conversation occurred between Niko, Larkin and teacher Melissa.

Larkin: How much is that? Niko: What do you mean? Larkin: Like the balls. How many balls is that?

Niko: I don't know. Maybe you can count them. But maybe 12. Or 10. It's definitely 10.

Larkin: Which one is 10? The balls on the grass or the balls in the bucket?

Niko: I don't know but you can count them.

Larkin then proceeded to count the balls on the grass. She would grab one ball, count it, then throw it to a different area, creating a new pile for Niko to count. Niko pointed and counted each ball as it was thrown and stopped counting when he correctly counted 20, calling to Teacher Melissa at the end, "There's actually definitely more than 20."

Can naturally extended his own learning through play. After some children discovered a crab apple tree in the yard and began referring to the fruit as cherries, Can decided to create a poll and survey the class about their ideas. With some support from teacher Jessica, Can created a



survey sheet and then went around the classroom asking children to state whether they believed the fruit was crab apple or not. Can was very invested in this project for the duration of the afternoon, delighted in his peers' participation and was eager to document his findings. Six children thought they were crab apples and five thought they were cherries. Four children said they didn't know. Some children commented:

Sloane: "It's red like an apple."
Sloane: "Who do they get eaten by?"
Cody: "Birds, of course!"

Today, Bing continues to be a center for leading-edge research, which informs our teaching practice and contributes to the understanding of child development. Our play-based program encourages children to pursue activities that they find intrinsically motivating. Teachers provide feedback to children daily, which fosters a growth mindset. They consider children's developing perspective-taking when supporting peer interactions.

Our teachers are caring, compassionate, imaginative and patient, which enables them to listen, model and plan curriculum to support children's language development. They are well versed in child development theory and practice and share a passion for teaching. These skills are integral to our professional development and essential to maintaining a high-quality program.

Dowley's three fundamental principles provided the framework for Bing's founding 57 years ago. They continue to guide how we prepare young children for our rapidly changing world. We hold firm to children's right to play, because it is how young children make sense of their world. Through play, Bing's program enables children to be inquisitive, confident, creative, flexible, collaborative and to develop a love of learning. This supports our goal of giving young children the best possible start to their educational journey and to prepare them for the life that lies ahead. §

Professor Hyowon Gweon on 'Curious, Cooperative and Communicative: **How We Learn From Others and Help Others Learn'**

By Karla Kane, journalist and former Bing parent

child watches an adult play with blocks. When she's given some similar toys to try, she soon realizes hers are not behaving as expected. "It's not sticking," she says, noting correctly that her blocks lack the adhesive property of the ones she saw the adult use. After communicating this, and trying some problem-solving, she quickly pivots to using the toys in a different way alongside her brother.

"All of this is happening in parallel, in less than a minute," said Stanford University associate professor of psychology Hyowon Gweon, presenting video footage of the study described above at the 2022 Bing Nursery School Distinguished Lecture, held on May 12.

What makes human learning so "distinctive, powerful and smart?" That's the question driving Gweon's work. And a crucial component of human learning, her research shows, is connection with other humans.

"If part of the answer is that we learn from other people, what are the basic cognitive capacities that we share as humans to support these processes?" she asked at the lecture.

Gweon, who heads Stanford's Social Learning Lab, said humans can interpret



By Mateo R.-H., 2 years 11 months

data generated in a social context from a young age, in both formal and casual settings. They're also able and motivated to communicate their knowledge about the world—and the self—to others.

In her presentation, titled "Curious, cooperative and communicative: How we learn from others and help others learn," Gweon offered examples (including some from studies run at Bing) of the sophisticated ways in which children draw inferences from observing others and decide how to share information with those around them.

Children are not "lone scientists" learning about the world through isolated first-hand experience. Nor are them merely "little imitators," blindly copying what they see others do.

Children are not "lone scientists" learning about the world through isolated first-hand experience, she said. Nor are they merely "little imitators," blindly copying what they see others do. Instead, they're constantly absorbing, adjusting to and analyzing data generated both by themselves and their fellow humans.

While anyone who has spent time at Bing likely already recognizes children as active learners and teachers, Gweon said that advances in computational cognitive science have allowed researchers to develop probabilistic models of learning, among other laboratory methods, that empirically demonstrate this. "I feel like parents and teachers know this already," Gweon said, "But it's one thing to note this intuitively and another thing to study these behaviors as a discipline of scientific inquiry."



Hyowon Gweon

Children's awareness of someone else's intentions can influence their behavior. In one study, when researchers presented themselves as "experts" on a toy and demonstrated a noise-making

feature, those children left to explore on their own were more likely to focus solely on replicating that feature. When researchers did not present themselves as experts, however, children were more inclined to explore broadly and discover other features of the toy. Their understanding of the researcher's intentions and knowledge—pedagogy vs. accidental discovery—influenced their actions.

Sensitivity to the intentions of others and the ability to draw inferences from observed data emerge early, said Gweon. She described a study in which children saw a researcher casually pull three blue toys, which squeaked, from a box of assorted yellow and blue toys. The children expected that the researcher pulled them out randomly and that therefore all the toys, of either color, might squeak. When the researcher pulled three blue toys out of a box of mostly yellow, though, children expected that the researcher must have pulled the blue toys out intentionally, and that the yellow toys would not squeak. "They're able to draw different inferences depending on the context,"

Gweon and her colleagues are also interested in children's abilities as teachers, and their capacity to generalize data that would be helpful for others.

"As soon as our children are starting to learn, they are also thinking about how they can help others learn," she said.

She described a study in which children were shown a toy bearing numerous buttons, only three of which, when pressed, would result in music playing. When children were asked to teach someone else how to use the toy, researchers wondered whether they would advise them to painstakingly try all the buttons or to just show the three functioning ones. As it turns out, the research suggests that children as young as 5 can determine how much information is necessary and adjust their lesson accordingly. If a learner is already familiar with similar toys, the child may save time and energy by doing selective teaching. If someone is completely unfamiliar with the toy, exhaustive teaching would be more appropriate. A helpful teacher, Gweon said, will prioritize sharing information that will save students trouble and cost and maximize their reward. "Humans," she said, including young children, "have the ability to reason about others' utilities."

To explore this, another study presented children with two toys. One, a simple box with one button that activated music, researchers classified as low-cost, low-reward. The second, a more complicated box featuring multiple buttons that activated a very pleasing light-up-and-spin feature, researchers classified as high-cost, high-reward. Once children understood how to use both toys, they were asked to decide which toy they wished to teach to a friend with no prior experience. The friend would explore the other toy without instruction.

PROFESSOR HYOWON GWEON

Hyowon Gweon, PhD, is an associate professor in the Department of Psychology at Stanford University and currently serves as the Director of Graduate Studies for the Department of Psychology and the Symbolic Systems Program. She received her PhD in cognitive science from MIT, where she continued as a postdoc before joining Stanford in 2014. Awards and honors include: CDS Steve Reznick Early Career Award, APS Janet Spence Award for Transformative Early Career Contributions, Jacobs Early Career Fellowship, James S. McDonnell Scholar Award for Human Cognition, APA Dissertation Award, and Marr Prize (best student paper, Cognitive Science Society). Gweon has been named as a Richard E. Guggenheim Faculty Scholar.

Researchers developed a computational model that predicts children's responses based on the learner's expected utilities—in other words, the expected rewards attained by the learner minus the costs incurred— and compared the model's predictions against children's responses. Results from the study were consistent with what the model predicted: Children more often opted to teach the difficult toy with the more exciting payoff.

"Children are readily able to think about the cost and the rewards of others' learning," Gweon said. This has implications for how to best pass on cultural knowledge, she said, because to be most effective, teachers and learners must strike a balance between what learners can discover on their own and what would be best transmitted by a teacher. "Utility-based reasoning can be a basis for accumulation and curation of useful knowledge over time," she said.

Emotional responses, including facial expressions and vocal cues, are also key to learning.

Gweon played video footage from a study run at Bing in which an experimenter showed children a box with an obvious button at the top that lit up the toy when pressed. The researcher then turned the toy away from the child and gasped in delighted surprise at something (unseen by the child) that the toy did, exclaiming, "That's so cool!" When left to explore the toy, the child was curious as to what function of the toy elicited the excited reaction from the researcher and was motivated to discover it himself ("What's so cool?").

This is an example of what Gweon called the "common ground condition," because both child and researcher had a presumed shared knowledge base about the object. Under the "no common ground" condition, an adult with what appeared to the children in the study to be no prior experience with the toy came and expressed surprise after the children had already tried it. In that case, the children assumed that this adult had simply discovered the same obvious function that they themselves were already familiar with. When left to play, they therefore had no reason to expect any "hidden function" and simply activated the button they already knew about.

Sensitivity to emotional cues as sources of information is apparent in younger children, too. A study of 13- to 18-month-olds involved an experimenter



By Kemi S., 2 years 10 months



By Laleh E., 3 years 1 month



By Rowan H., 3 years 6 months

About the Author



Karla Kane is an awardwinning local journalist; former preschool teacher: and the singer, songwriter and ukulele player for the band The Corner Laughers. She has a bachelor's and

a master's degree in anthropology and lives in Redwood City with her husband and bandmate Khoi, her cats and her daughter, Octavia (a proud Bing alumna).

pulling a ball out of a box filled with mostly red balls and just a few white. The assumption was that if pulled at random, a red ball would be more likely to be extracted. Knowing from prior studies that infants tend to look at unexpected outcomes longer, the experimenter first peeked at the ball before showing it to the child, in some cases showing surprise and sometimes a neutral face. Researchers wondered whether they could cause a reversal of pattern of looking time depending on the emotional reaction of the experimenter. And indeed, they could. The babies used the emotional response to predict an outcome. "It shows that not just older children but even young infants are able to use other people's emotional expressions ... as useful information to make a prediction about what they couldn't see before," Gweon said.

Children can also be motivated by the desire to manage what others think about them. In a study on this, children were shown a red toy and a green toy by a researcher. They were informed that

another researcher. Anne, would watch them play. The first researcher activated a music feature on the toy but, by design, the children were unable to do so on their first two tries, with Anne watching. After Anne left, they were finally able to succeed. Gweon referred to this as the "absent condition," with the critical aspect being that the children believed Anne left the room thinking that they were incapable of activating the red toy. The children were then given the chance to try the green toy and had the same experience: two failures followed by success, the only difference being Anne was not present to observe. With another group of children, the "present condition" group, everything was the same except the timing of Anne's departure, with Anne leaving the room knowing the children could activate the red toy. The children were then asked which toy they would like to show Anne upon her return. For those in the absent condition group, there was a higher tendency to pick the red toy so that they could show off to Anne and prove that they were able to succeed with it after all.

"What children are trying to do here is try to figure out what information can really change what Anne thinks of them," Gweon said, adding that feedback from others is an important factor in how humans learn about themselves. She and her colleagues are interested in how humans analyze that feedback. Input from one source might have a different meaning or value than from another. That's what another study at Bing explored.

Children were asked to create two tracings, which were then concealed in two separate envelopes. The children were shown a video in which a "contingent" or "selective praise" teacher looks at a series of children's tracings—some objectively "better" than others—and deems a few "really good," earning stickers. The rest she deems "OK" and does not award stickers. A second teacher, on the other hand, overpraises the artwork, awarding a sticker to everything. The researchers then told the children they were showing their work to the same two teachers and that they could bring back their "best" tracing back to show their friends.

Children showed a preference for choosing the one deemed "good" by the selective-praise teacher (They also identified the overpraise teacher as the one trying to be the "nicest."). In cases when the selective-praise teacher rewarded the objectively "bad" tracings, though, the children made different choices, proving they weren't merely tracking the frequency of praise. "They're able to distinguish informative versus uninformative feedback," Gweon said. "They're learning from others about what kinds of feedback they provide, and they use it in order to learn about the self."

The motivation to help others also emerges early. Ongoing studies are looking at how children use their intelligence to help others learn, including a parent-child study at the Palo Alto Junior Museum and Zoo in which toddlers are able to help a parent who is struggling with a toy.

All these examples from Gweon and her colleagues' research aim to show that the nature of human learning, even very early in life, is rooted in social context. "The power of human intelligence," she said, "comes from our ability to figure out how to use our intelligence for ourselves and for others." **B**

Orange Tree A song by Kali B., 5 years 1 month

There was an orange in a tree. The orange tree was in a garden.

The orange tree was getting old and old.

They watered the plant. And the tree got better!

Then flowers began to grow. The oranges came next.

The oranges grow'd and grow'd Big!

Watch the lecture at http://youtube.com/bingnurseryschool

Research at Bing 2021–2022

By Chia-wa Yeh, Head Teacher and Research Coordinator

o children prefer to get feedback about their work from an adult who gives praise selectively rather than someone who praises everything, regardless of the quality? Stanford University researchers explored this and other questions by working with children at Bing Nursery School this year.

Bing serves Stanford as a laboratory for research in child development. It was built with a grant from the National Science Foundation along with a gift from Anna Bing Arnold and Peter Bing, mother-and-son philanthropists. Since the school's opening in 1966, many researchers in Stanford's Department of Psychology have relied on Bing to advance their understanding of developmental psychology.

Nearly six decades later, Bing continues to support Stanford scholars in their research, while providing graduate students with hands-on training in research methods under the guidance of their faculty advisers. Most studies take place in the "game rooms" located around the school atrium and are designed in gamelike formats to be engaging for children. Insights from the studies contribute to the body of knowledge about what children think and how they learn.

This unique learning environment not only prepares young scholars for careers in academia, it can shape their professional trajectories. In commemorating our 50th anniversary in 2016, we invited researchers to reflect on their experiences at Bing:

Vikram Jaswal, professor of psychology, University of Virginia:

"My experience as a graduate student and researcher (aka "game room teacher") at Bing profoundly shaped my professional and personal life. The staff at Bing taught me how to think about children, helped me transform my lofty research questions into realistic (and fun!) 'games,' and impressed upon me lessons about interacting with children that I try to pass on to my own students (and with my own child) to this day. ... The thousands of children who participated in my studies at Bing helped to launch my career as a developmental psychologist, and I will be forever grateful to them."

Andrei Cimpian, professor of psychology, New York University:

"Bing was just an amazing resource and an essential element of my graduate training. It's truly a researcher's paradise, a fact that I've grown even more aware of after leaving and seeing first-hand the challenges of conducting research in schools. ... Many of my research ideas have been inspired by my conversations with the wonderfully bright children at Bing. It's hard for me to even imagine what my research would have been like without this formative experience."

Bing welcomed researchers back to the school in the fall of 2021 after pandemic-related restrictions were lifted for inperson research. They were once again a part of the classroom, interacting with children to get to know them. Children, in turn, enjoyed talking and engaging with the "game room teachers."

Looking ahead, here are summaries of studies conducted during the 2021–22 academic year:

In a follow-up study about children's concept of the self by psychology professor Hyowon Gweon and her former doctoral student Mika Asaba, children were invited to make two simple line tracings. Then they watched videos

of two teachers giving feedback on tracings done by others. Some of the tracings were close to the line drawing, while some were far from it. One teacher praised only the tracings close to the line drawing, while another teacher praised all tracings. Researchers then told children they could take their best tracing back to their classroom and were asked to choose one teacher in the video to help them figure this out. Children pointed to the picture of one of the two teachers. The researchers are interested in whether children will choose the selective teacher when they want to decide which of their tracings is of better quality.

In another study, first-year psychology graduate student Peter Zhu explores whether children are curious about what others think of them. Children were invited to draw a picture and were told that it would receive a sticker if the researcher thought it was good. (All children's drawings received a sticker.) Zhu briefly stepped outside the room while still observing the child. Either the child's drawing or one by another child was left in a file folder on the drawing table. Zhu is interested in whether children peek to see if they received a sticker as opposed to when the drawing of an unfamiliar child is left on the table.



In a pilot study, Teresa Garcia, manager of the Social Learning Lab, looked at whether children are sensitive to the amount of time needed to teach the same material to individuals versus a



group. She introduced children to five toy animals, each in their own individual house. In this play scenario, the animals wanted to learn names of household objects from the child. In one condition the five animals wanted to learn different words, while in another condition all the animals wanted to learn the same ones. Garcia investigated whether children spontaneously taught the five animals as a group in the latter situation.

In another study by third-year psychology graduate student Rondeline Williams, children were presented with four miniature wooden houses and two toy characters. Children took the characters to visit each house, one by one. When the doors of each house opened, children heard different sounds coming from the houses (e.g., loud conversation, music, silence). Researchers asked children if the characters should engage in activities such as reading, sleeping or dancing in the respective houses. Williams is interested in whether children consider noise

level when choosing an environment for different types of activities.

Children watched animations of appealing creatures on a laptop monitor in a study by second-year psychology graduate student Anjie Cao. When they finished, they could press the spacebar on the keyboard to move to a different animation. Many animations repeated but occasionally novel creatures appeared. Cao investigated whether children looked longer when novel creatures appeared and how such curiosity might shape children's learning.

Devon Spika, a visiting graduate student researcher in economics, examines what children understand about the roles of mothers and fathers and whether children's story books affect children's understandings of gender norms. Children played guessing games and reaction-time games in response to different voices, images and/or words to elicit implicit assumptions. One group of children listened to a recording of a book portraying mothers in both family and career roles while watching

corresponding illustrations on a laptop computer. The other group listened to a recording of a book about two children's adventures in nature, also with corresponding illustrations on the display. Children participated in a follow-up session with similar games about two weeks later. Parents were invited to complete an online survey.

Pairs of children played a matching game in second-year psychology graduate student Veronica Boyce's study. Boyce designed cards with four abstract tangram shapes. One child had a card with an image on it and described it to the other child, who had two cards to choose from. One of the cards was a match. Children took turns describing and matching. The abstract images were used repeatedly and in different pairs. Boyce is interested in whether children

gradually develop shorthand names for the shapes after repeated experiences describing and matching them. **B**

Watch a video about research at Bing: http://bit.ly/research_at_Bing

ACCREDITATION

NAEYC Accreditation Effort: Maintaining National Standards for Quality

By Adrienne Lomangino, Head Teacher



his year Bing was reaccredited by the National Association for the Education of Young Children, an endorsement that comes up for renewal every five years. This undertaking involved a process of self-study, modification and documentation. Preparations were a year-long endeavor, involving examination of all aspects of the school, both in the classrooms and administration.

Across the United States, accreditation from NAEYC is seen as the gold standard for early childhood programs. The organization describes itself as a "professional membership organization that works to promote high-quality early learning for all young children, birth through age 8, by connecting early childhood practice, policy, and research."

NAEYC has 10 standards for quality that cover all aspects of the education program, from policies and schedules to materials and moment-to-moment interactions. The standards are:

- 1. Relationships
- 2. Curriculum
- 3. Teaching
- 4. Assessment of child progress
- 5. Health
- 6. Staff competencies
- 7. Preparation and support
- 8. Families, community relationships
- 9. Physical environment
- 10. Leadership and management

To demonstrate that the standards are achieved, a program must provide evidence of how it meets the extensive criteria for these standards. The Bing staff constructed separate portfolios of evidence representing the Twos classrooms, the nursery school classrooms and the administration. Together, these digital portofolios included 430 slides.

Schools are living, growing places, and the staff approached the self-study



"Accreditation demonstrates your commitment to quality and continuous quality improvement."

process as an opportunity for improvement. Scrutinizing and describing the ways in which teachers support children's growth through selection and arrangement of materials, organization and facilitation of activities, and supportive interactions enhanced teachers' professional awareness, fluency and pride.

Most of the changes related to the creation and revision of various documents: We sought to clarify and elaborate on our policies and practices, particularly in relation to guidance and

discipline, assessment and curriculum goals. They are part of a growing body of documents that articulate Bing's mission, philosophy, practices and professional expectations.

The accreditation process culminated in a site visit in April, during which an assessor from NAEYC observed in classrooms and examined the portfolios of evidence. On the day of Bing's site visit, everything was ready, and the day unfolded with the hum of children at play. The teachers showed the same responsiveness to children and attention to the environment that they exhibit every day.

In June the school received notification that NAEYC accreditation had been granted. The congratulatory letter noted, "Accreditation demonstrates your commitment to quality and continuous quality improvement." While programs must reach an 80% pass rate for accreditation approval, Bing received 98%. This scoring illuminates that the school is continuing to fulfill its mission of "providing an exemplary program of play-based, child-centered education."

CLASSROOM CURRICULUM

Fly Like a Butterfly!

By Rinna Sanchez-Baluyut, Head Teacher

"Fly like a butterfly.
Fly like a butterfly.
Fly like a butterfly through the sky."

his song, sung by Bari Koral, is often played during music and movement time in our Twos class. As soon as children hear this song, they grab their scarves, run around the yard and flap their arms pretending to fly like butterflies. This song became even more meaningful this year when caterpillars visited our classroom.

In the spring, tiny painted lady caterpillars arrived in bug jars for children to examine. The crawling larvae displayed

their black fuzzy bodies and soft spine extensions as children observed their movements with magnifying glasses. The children shared what they noticed with their peers and teachers.

Gray: "They're moving! This one's not moving! Why isn't he moving?"
Ollie: "They have many legs."
Dylan: "What are they eating?"

Every day, some children would immediately head over to the caterpillars after arrival and would marvel at the changes. As the days and weeks progressed, the children continued to inspect the caterpillars diligently and patiently.



Tilly: "They're more big!"
Lainey: "They look like they got
bigger!"

Gemma: "They got so big, so big! How did they get so big?"



As the caterpillars grew and formed their chrysalides, a teacher transferred them to a bigger net enclosure. Fascinated and curious about this transformation, some children took a much closer look. Teachers would ask questions: "I wonder what they're doing in their chrysalis? How long do you think they'll stay inside?" Children readily shared their insights, observations and assumptions:

Juliet: "They turned into "tootoons" (cocoons)! They're hanging from the top!"

Lee: "It's wearing a sleeping bag!" Peter: "And soon they'll become butterflies! Big butterflies!"

The following week, the children discovered butterflies had emerged. Delighted and amazed by their transformation, children were captivated by the painted lady butterflies. They noticed their colors, their patterned wings and the food they were eating. They spent an extended period examining the butterflies.

Gray: "Hi, butterfly! It's orange now! This one have brown, and orange and white."

Naia: "I notice that one is very tiny." Sarah: "Look at this one. This one is sleeping. It need to eat." Aerin: "They eat outside. You know butterflies pollinate flowers. They need to drink the flowers. They need to find her mom. They need to go home with her daddy."

Once the butterflies were ready to take flight, the class slowly released them. The teacher gently took out one butterfly at a time and transferred it to a child's hand. While some butterflies took flight, others decided to stay on a child's hand, which offered an invaluable opportunity for children to admire and gaze at them. This experience even allowed one child who was anxious about butterflies to quell her fears as a butterfly calmly stayed on her hand for over 30 minutes.

Throughout the caterpillars' metamorphoses to butterflies, the children regularly visited, observed and investigated the transformation. They hunted daily for changes in the caterpillars and looked through books to deepen their understanding of the process. Additionally, teachers offered materials such as paint, colored pencils and markers so children could create their own interpretations of the caterpillars and butterflies.

We noticed that as the children examined the caterpillars in the bug jars and the butterflies in their hands, they remained patient and regulated their impulses, showing compassion and gentleness

toward the small creatures. Although excited by the transformation, the children remained calm and quiet to avoid frightening the butterflies. This shared experience allowed children to participate in a joint conversation about the process and express their thoughts, share their observations and ask questions.

The children's interest in the natural world was not limited to caterpillars. This became evident as they searched for other small living things in our yard. Roly-polies, slugs, ladybugs and spiders were some of the other creatures they keenly sought out and placed in bug jars that were later shared during story time.

Although the progression of this metamorphosis took a few weeks, children invested their time and energy, building curiosity about what would transpire. Their observations brought new meaning to the song "Fly Like a Butterfly" as children grabbed those scarves and flapped their own wings when they danced during music time. **B**



Collaborative Storytelling with Children: Honoring the Voice of the Child

By Nandini Bhattacharjya, Head Teacher, and Betsy Koning, Teacher

nce upon a time, the children in West AM began to show a flair for storytelling and dictated a variety of stories for teachers to write down at the language table. Thinking this interest had the makings of a

group project, the teachers sought a way of focusing this activity on a unifying theme. The South African folktale and lullaby Abiyoyo retold by Pete Seeger came to mind since it usually intrigues children and inspires them to ask many

questions regarding the story arc. The teacher leading story time decided to read the book without showing the illustrations to leave more of the interpretation of the story up to the children's imagination. Throughout the week, she

allowed the children to create their own illustrations through a combination of drawing and collage. Children loved this idea and created detailed pictures that also led to additions to the story.

This opened a window to a different way of storytelling. The teachers decided to continue experimenting to see what would happen if children had an opportunity to add their own ideas to a storyline from some of the books from our library. As the children's ideas poured in, we wrote each one down on a Post-it note on the relevant page.

We chose a book with a simple narrative that lent itself to being extended beyond the author's original ending, Let's Make Rabbits by Leo Lionni. At the end of the tale, two paper rabbits become real and hop off the pages of the book. Teachers asked the children what they thought would happen next. Over the course of the week, many children added interesting adventures that the bunnies embarked upon after they were free from the pages of the book. Some adventures reflected their own experiences, like going to the beach or Disneyland, while others focused on fantasies they hoped would someday be a reality, such as riding in Santa's sleigh to help deliver toys. Sometimes the adventure seemed to take pieces of familiar storylines from children's literature. Roman contributed one such trip the bunnies took by saying, "The bunnies became real, and they went out and got lost in the woods. A wolf came to eat them, but the bunnies ran away and built a house out of wood. They made a rocking chair out of wood. Then they rocked and rocked to sleep," alluding to themes from traditional fairy tales.

One week we read *Du Iz Tak?* by Carson Ellis, a book the author wrote in a madeup bug language. The children invented what they thought the English translation of the text would be. For example, Arnold interpreted the title as "It is Growing," as the illustrations portray a growing plant as the center of attention. This story includes a lot of dialogue between the insect characters in their

unique language, and we found children eager to construe the meaning of the bugs' words. The pictures portrayed a flower growing from a seed, blooming and then eventually losing its petals as it withers away. The children thought the bugs' conversation described this life cycle and lent their interpretations of the process to provide the dialogue.

As we read the story using West AM children's words, we realized how enthralled they were when their additions to the story became part of the book. The more we used the children's words to tell the story, the more we saw children being thoughtful and creative with their language and enjoying the storytelling process. Furthermore, the teachers found that we were modelling the idea that stories can be varied and that we have the freedom to write our own versions of stories—an idea that could also be helpful in children's dramatic play scenarios. We also saw that children were learning to respect their peers' ideas as they listened with attention to the different perspectives being incorporated in the story. They were curious to see what their friends had added to the text. Using children's language and drawings to build up the storylines of existing books throughout the week encouraged them to be expressive and descriptive with language.

Yet another week we read Tuesday by David Wiesner, which has just a few words but extremely detailed illustrations of frogs floating away on lily pads on a Tuesday evening. Children were intrigued by the pictures and came up with the storyline of how "gravity went away" and so the frogs started to fly.



After the basic storyline was set, the children were very interested in adding dialogue or a perspective about what each frog was thinking or feeling based on the character's facial expression and body language:

Sky: "Why am I not flying?" Sky: "I am higher than you!" Rowan: "Gosh this is fun!" Luna: "I am flying away to the moon!"

Luke: "Actually, I am flying to Luna. That's another name for moon." Kristina: "I want to go zip lining!" Roselyn: "Oh, no! We are coming down! Gravity is coming back"

Children who prefer stories to be grounded in facts seemed to be trying to grasp the imaginative ideas narrated by peers. Aszi said, "It's not a real story. Gravity has not gone away. If gravity really went away, then the trees and everything would be floating. Maybe it's just magic in a story." It was interesting for teachers to see how each child's personality added a new dimension to the story. Luke, who is very invested in superheroes, said, "This frog wants to wear a cape because he thinks he is Spiderman now. He is spinning a web to chase the dog away." Children closely examined the pictures and described the small details in them to expand the story.

We combined the reading of *Pancakes* for Breakfast by Tomie de Paola with a weeklong cooking project that allowed the children to experience some of what the characters did in the story (but without such difficulties acquiring the necessary ingredients). This helped them to take the perspective of the main character as she worked to make herself a tasty breakfast. Afi's contribution to the book's text seemed to reflect his own feelings, "They are excited to make pancakes. It's going to be yummy!" To further expand the children's understanding of what the character was experiencing, one of the teachers brought in a butter churn so the children could make butter for snack time and go through this time-consuming

process. Then at snack time, the children had a chance to feel the satisfaction the main character felt when she was finally able to sit down to a plate of pancakes with butter and syrup, and they incorporated that sense into the words they provided for the final pages of the story.

Our journey of nurturing and respecting the children's voices and ideas through storytelling in conjunction with a familiar book engaged the group week after week. One morning, Joshua, who had been listening to audio books at home, said, "My favorite part of a book is listening to the story, instead of seeing pictures." This made the teachers curious to discover the children's preferred book formats. We posed the question to the

children in West AM, "Why do you like picture books?" Johnny aptly said, "Seeing pictures is more interesting, but I also like adding words, and making up a story is really cool. I can make them funny." Trying to convey his excitement about adding his own text to stories, Arnold said, "It feels like shooting cannon balls into outer space." Sky added, "In picture books, you can make nothing into something." This conversation led us to investigate, via voting, whether the children liked books with words and pictures, books with just words or books with just pictures. We collected the their responses and recorded them on a chart. We found out that though a majority still preferred books with words and pictures, some of the older children preferred pictureless

books. "My favorite part is listening to the story and imagining all the pictures," one of these older children said.

Teachers laminated copies of the children's versions of the books and placed them in a basket near the bookshelves for the children to revisit, which they did often. Many knew the parts they had contributed to the story, and as they flipped through the pages they giggled when they came across the humorous additions they had made. As we wrapped up this project for the quarter, we found that children's understanding of narratives grew through this experiment, and teachers had discovered more interesting ways of telling and extending stories with a group of young children. **B**

In Support of Mixed-age Groupings: An Optimal Model for Early Childhood Classrooms

By Parul Chandra, Head Teacher

nteracting with peers of different ages has historically been part of the natural order of childhood. You may have grown up in the city where you and other children played in backyards or streets only going home when the streetlights flickered on. Maybe your childhood was in a rural environment, where you and your friends built forts in the forest and caught tadpoles in the creek. Or perhaps you had a very close family, where you and your siblings spent hours creating pretend worlds and playing games. While childhood experiences vary greatly, there is one thing that many children have in common—interacting regularly with a group of children who are both younger and older. Classrooms with young children of various ages mimic these family structures and neighborhood groupings, providing all with the opportunity to observe, emulate and initiate a wide range of competencies. The wider the age range, the greater the opportunity for children to experience empathy, develop

friendships, and spend time with children with differing developmental skills.

Children experience the advantages of mixed-age groupings at Bing, where mixed-age classrooms are a tradition. Bing's founding director Edith Dowley, a proponent of progressive education, emphasized in a seminar in 1971 that children's learning and development are

Children experience the advantages of mixed-age groupings at Bing, where mixed-age classrooms are a tradition.

enriched and enhanced by mixed-age cohorts, commenting: "We mix our age groups, so that children always have a chance to be the youngest, the oldest and the in-betweens. Little children have peer models that are much easier to imitate and learn from than adults are, and the older children look back and pace their growth and see how they learned, and they say things like,



'I couldn't do that last year either but now I can." Bing teachers still follow and share this point of view and our nursery classrooms for 3- to 5-year-olds are a testament to Dowley's vision.

Many educators and psychologists have studied the multiple benefits of mixedage classrooms. Maria Montessori, who opened her first school for 3- to

5-year-olds in 1907 for children who played on the streets of Rome, was a strong proponent of multi-age groups. She noticed that children became aware of their multi-age peers and became almost as deeply invested as teachers were in the progress of their peers' work. Montessori defined what classrooms should look like: "The main thing is that the groups should contain different ages because it has great influence on the cultural development of the child. This is obtained by the relations of the children among themselves." According to Montessori, "There are many things which no teacher can convey to a child of 3, but a child of 5 can do it with ease." Montessori emphasized that the multi-age classroom gives children the chance to learn from each other.

Enhancement of social development is another advantage of mixed-age classrooms noted by early childhood educators. Lillian Katz, professor emerita of early childhood education at the University of Illinois at Urbana-Champaign, and her colleagues wrote about this in *The Case for Mixed-Age* Grouping for Early Education, noting that in mixed-age groups, older children are perceived as contributing and younger children as needing their contributions. Additionally, Katz postulated that "If learning tasks involve children working together instead of individually or competitively, fruitful collaboration between 'novices' and 'experts' can occur."

These classrooms additionally help stimulate the children's cognitive development. This time to collaborate, observe, teach and dialogue drives the learning, where children are challenged, excited and willing to take risks. Younger children watch older children perform a variety of complex tasks and try those out for themselves, inviting support from their older peers. French essayist Joseph Joubert's words—"To teach is to learn twice"—is a testament to our children's unquenchable thirst to share their skills and strategies with others who want to receive, and in turn reinforce, the learning for themselves.



Many more advantages of multi-age classrooms exist. Among them:

- Focus on discovery and curiosity instead of competition as children are exposed to a variety of interests, talents and personalities of their peers.
- Acquisition of flexibility and resilience as children perceive the differences in their developmental levels and competencies and adjust their expectations of one another. Over time, these relationships are opportunities for ingraining empathy, patience, perspective-taking and partnership.
- Development of an attitude that progress, skills and traits are not inborn but come from learning. As children work with a diverse group of peers, they start to understand that neither ability nor skills are fixed, but they can be learned and developed over time. "This view creates a love for learning and a resilience that is essential for great accomplishment," said Carol Dweck, professor of psychology at Stanford in an interview.
- Older children's recognition of their own increasing competencies as they take on the expert role with their younger peers. This mentorship role helps older children develop selfconfidence and leadership skills. They collaborate with younger children, encouraged by the energy, enthusiasm and wonder exhibited by their younger friends. An example of this happened during a child's conversation with a teacher. An older child demonstrated

to a younger child how to pump on the swing by alternately extending and bending his legs. The older child said to the teacher, "I couldn't pump on the swing before. You had to give me pushes. Now I just need a starter push." Here, the older child noticed his own growth and increasing competencies as he modeled for his younger friend.

Below are some of the comments older children made to support younger children as they all played together in Center AM this school year.

- "That's pretty good, R. Keep going."
 (Encouraging a friend as he tries to paint the letters on his work.)
- "First you fold it and then you go over and under and staple. Want to try?" (Helping a friend make a costume for a story play.)
- "Push, push, push then tuck, tuck your legs and that is how you go high on the swing." (Modeling how to pump on a swing.)
- "Watch me put this block on the tower... oohh ... carefully. Now move back so you don't knock it over." (Instructing a peer on how to build a stable structure.)
- "Follow me. Let me show you how I found it like last time." (Providing support to peers during a scavenger hunt activity.)
- "Next time you can say 'I want the truck." (Modeling social problem-solving in the sand area when two children wanted the same truck.)
- "Hey, I 'learnt' her how to write a G!" (Showing a friend how to write the letter in her name.)
- "Slow, first you go up, then swing your leg. No, just your leg. Hold on to the bar and then like this." (Modeling climbing the A-frame.)

By relating to their peers, children synergistically get each other's neurons firing away. Recently, a child created a calendar that had more than 100 days on it. He wanted to represent a way to keep track of how long our classroom caterpillars would take to hatch. He



built upon his calendar daily, working diligently to add more numbers. When other children observed his self-initiated project, he got their attention. Soon we noticed that he was surrounded by a small group of multi-age children with clipboards and pencils creating their own versions of calendars! They were excited to follow his lead and to learn more about numbers and calendars.

As the older children model appropriate behavior and offer leadership and

support to younger and less knowledgeable children, they also strengthen their own skills. Younger children benefit from the opportunity to look up to older children as role models. This school year, for instance, we observed children develop a love for language, music and an interest in numbers simply by observing and interacting with other children in their class. These moments are special, and teachers at Bing recognize the importance of these opportunities for peer tutoring. **B**

Stir it, Scrape It, Make It, Bake It! Eat It, Repeat It!

By Mark Mabry, Head Teacher, and Paloma Moreno, Teacher

hen children arrive at school every day, they are welcomed with many opportunities for pretend cooking and baking play. They see a play kitchen in the center of the classroom and an area for sand and water play with real pots and pans and utensils. Herbs and flowers are readily available to pick from the garden and add to their own recipes. ("Candy soup" seems to be a perennial favorite!)

These activities appeal to children because they're so familiar and relatable—all children have experiences preparing and eating food with their families. Those who are new to the classroom make their first connections with new peers through cooking and baking play. Everyone knows the play script: They combine ingredients, stir and mix, put their culinary creation in the oven, wait for it to cool and then serve each other their tasty delicacies.

So it comes as no surprise that real baking and cooking projects immediately draw children in. One week in the fall quarter, a teacher introduced the children in Center PM to yeast bread that they helped make and then were able to eat at snack time. The enthusiasm that this garnered could be measured by the number of extra chairs that we had to squeeze



around the table to accommodate so many interested and enthusiastic bakers.

Noticing the huge interest children had in making their play real, we continued to provide more gastronomic opportunities week after week, with the teachers bringing in their own favorite recipes to share with the children. Mark led off with challah bread, Lindsay offered apple crumble, Paloma made tortillas, Maryam baked banana bread, and Vanessa cooked vegetable soup. Every day, children would enter the classroom with joy and ask enthusiastically, "What are we making today?" followed by "Can I do it too?" All hands were on deck kneading dough, measuring flour, pressing tortillas, smushing bananas, and cutting vegetables. Because children had the chance to help make these creations every day of the week, they became



expert cooks by Friday, remembering the recipes and the steps involved.

Baking enabled children to expand their vocabulary and explore science, math, and social connections. Baking and cooking are everyday tasks, but we often forget the chemistry that is involved when combining various ingredients watching a yeast mixture rise or seeing the changes that happen before and after an encounter with heat from an oven or stove. Successfully creating something edible requires practice with counting and measuring. Teachers incorporated literacy into cooking projects by demonstrating how to follow a recipe from top to bottom. Finally, making food together required collaboration, patience, taking turns, self-regulation, and, most deliciously, sharing fresh food with the entire classroom. **B**

14

Clay: Developing Strong Bodies and Creative Minds

By Nancy Verdtzabella, Head Teacher

"It is, thus, that materials show their hand at the dawn of development. It is materials that invite motor actions, linking discovery to imagination in what will become an inexhaustible interplay guiding artistic growth and development."

—Judith M. Burton, art education scholar

ended materials (blocks, clay, paint,

lay is one of the five basic open-

sand, water) available for children's

play at Bing Nursery School. Offered in

West PM daily, children gravitate to it

naturally. They develop a relationship

moment they touch it. And while clay is

heavy and not so easy to manipulate, in

my 30 years of teaching I have marveled

while observing children ages 2 to 5 use

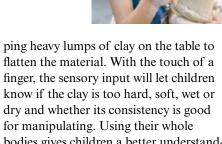
through the body and mind, supporting

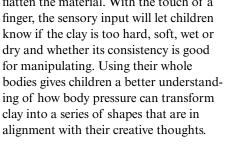
it successfully. Having access to clay

encourages meaningful engagement

the development of the whole child.

with the flexible medium of clay the







I introduced clay in West PM in early fall by placing a huge block of the material about the size of a half-gallon of milk in the middle of the table. This setup ignited the children's curiosity. Some engaged with the material instantly while others watched to see what would unfold. When a child asked where the tools were. I responded by pointing to the child's own hands. My response surprised the children, as they were used to the plethora of tools that accompany play dough kits. However, when I explained the marvelous ways hands can manipulate clay, the children developed a confidence that allowed them to shape the material using their hands as the primary tool. The children demonstrated how capable they were of making cakes and cookies without feeling the need to depend on tools to produce the same "perfect" shape each time. Creative thinking was evident as children formed small pieces of clay into intricate designs with their hands and added them to their creations.

As with any material in our learning environment, the more children engage with clay, the more comfortable they are

One of the greatest attributes of clay is its ability to be open-ended. As children work with clay, their ideas come to life. At the beginning of the COVID-19 pandemic, clay use at Bing was put on hold for a short period while we learned more about COVID safety practices. This school year we were delighted to re-introduce clay to children, knowing that COVID was not highly transmittable through materials.

Children naturally learn through their senses when working with clay. With each hands-on interaction, children are learning new attributes of clay and things about themselves.

They see the natural color and smell the earthy scent that distinguishes clay from other malleable mediums such as play dough or polymer clay. They notice the sounds as they manipulate the clay. They use fists to pound the clay and fingers to squish, pat and cup it. Children use their upper torso and legs for lifting and dropusing it as a tool to work out or interpret their ideas. The teachers help children strengthen their relationship with clay by casually modelling basic techniques such as rolling it into a ball or snake, making coils or pinching a pot, encouraging creativity. Some children come to the clay table with a concrete idea, while others come to experiment, but all form an initial shape and transform it into others. The process becomes the focus and ignition for creative development. Children will create and find satisfaction with their creation. Following the accomplishment, the clay will metamorphize into something different only minutes later. Each modification is deliberate and exciting when it reveals its new identity.

The process of transforming one shape into another is intense yet gratifying for the child (and teacher) to witness. Going through a series of clay conversions strengthens children's ability to understand the medium more fully as a material that can become anything they decide. Children become cognizant that hands working together with the mind make a powerful team. This process, which allows one idea to flow into the next, also reveals children's ability to validate the process and be content with the series of modifications rather than focus on a tangible artifact as validation for their hard work. At cleanup time, any onlooker can witness children happily shaping the clay back into a lump and placing it in the clay bin. They know that next time they come to school, a fresh lump of clay will be waiting for them to be transformed, making their creative ideas visible once again. B

Read All About It! A Daily Newspaper Unfolds in East AM

By Todd Erickson, Head Teacher

ewspapers have informed, entertained and inspired people for over 400 years. East AM's daily classroom newspaper, the East AM News, provided a yearlong platform for East AM children to share their experiences, ideas, questions and creativity. The East AM teachers launched the East AM News during the autumn quarter and continued the new tradition through the winter break, when children added their news to a take-home newspaper. As the newspaper became a part of our classroom culture, it thrived in the winter and spring quarters. Our daily newspaper welcomed participation from a wide range of children, including some of our more reserved, and bolstered our sense of community and connectedness through the daily sharing of the newspaper during our session-ending story time. It has also motivated children to explore and hone their communication skills, not only through letters and words but also through art, numbers and other symbols.

Bing classrooms often inspire and inform one another, with the East AM *News* serving as a recent example. Many East AM teachers knew the potency of newspapers from their paper-making experiences in other classrooms. After experimenting with newspapers during the summer of 2021, the East AM teachers committed to a daily newspaper as the new school year began. The physical production of the East AM News was

a decidedly low-tech affair: a piece of white easel paper (24 inches tall by 18 inches wide) turned horizontally and folded in half, with the newspaper's name and date written atop the first page. When children arrived in the classroom each day, they usually walked past a teacher sitting at the language table (the spot for exploration of letters, words and stories), which was the informationgathering center for the East AM News. The teacher's question, "Do you have any news for the newspaper?" invited children to share whatever was on their minds at that moment. As children dictated their ideas to the teacher, they observed the teacher's use of letters to represent their words. Those letters were assembled into words and sentences, which were then read back to the child as a thought or a series of thoughts. Even if a child was not yet interested in reading, there was great meaning in watching verbal ideas take shape on a piece of paper.

Of course, our classroom consisted of children whose development spanned the wide range of what we call emergent literacy, or the reading and writing experiences of children before they learn conventional reading and writing. Children could dictate a short sentence to the teacher about after-school plans, draw a picture that illustrates their news or write down some or even all of the words in their news. Teachers supported the process by sounding out the words,





writing words down for children to copy or encouraging children to take guesses at writing the words. Teachers met children at their individual developmental level, allowing them to find the optimal means for sharing ideas and questions.

While the written word was an important feature of our newspaper, the spoken word was equally significant. Even before children delivered news to us, they first had to consider what it was that they wanted to communicate. It was common for parents to tell us that their child made plans to share a specific news item from home in the next day's newspaper. As children then attempted to apply appropriate vocabulary and syntax while sharing their news, they further boosted their overall literacy. Similarly, listening to and making sense of the news from other children not only bolstered emergent literacy skills but also sharpened critical thinking and reflection abilities.

As is true of most young children with burgeoning literacy, the East AM children also employed visual means for sharing information and creativity in the newspaper. Kimia added her visual representation of a planet when she reported, "I saw Jupiter in a telescope. The red dots are the storms." Meanwhile, Maddie Jo mixed colors together in the East AM News and told us, "Red



and blue makes purple." Near the end of the spring quarter, Olivia traveled to Atlanta and drew a picture of the city as a part of her news. In this way, the *East AM News* served as an opportunity for children whose expression stretched beyond words and moved into representational and even abstract art.

A regular feature of the East AM News was the weather. A child might head outside to gauge the weather and come back to share her new information, and sometimes she would go beyond words to convey the information. One fall morning, Eloise returned from an outdoor check of the weather to report, "It's cold outside! It's windy!" and then drew swirling blue lines to represent the wind. In the winter quarter, Aiden checked the weather on a teacher's phone then wrote the number 68 followed by a capital "F" to tell his classmates that the temperature was 68 degrees Fahrenheit. We would also occasionally check the temperature throughout the morning to gauge any changes. At 8:30 one winter morning, William reported that it was "freezing cold" while Adam added that it was "shady." An hour later, Beatrice added that it was "52 degrees right now. It will go to 60 degrees around like 2:00 pm-ish. On Friday, it will be, like, 68 degrees, a great time for summer."

The East AM News not only profoundly bolstered emergent literacy but also the children's sense of competence. Children



knew they had a place that was ready and waiting for them to share their important knowledge or questions. By dutifully recording the children's ideas, regardless of how they sounded to our adult ears, we validated them as individuals. And through the sharing of their news during story time, we allowed both the boisterous and the reserved children to be seen and heard.

In addition to bringing news from home, the children were also encouraged to offer news directly from the morning session. We asked them to record news from the "field" as they worked with teachers in different areas of the classroom to share the events that transpired that morning. Several children were also inspired to make their own newspapers. Some made papers during session, essentially becoming beat reporters, while others created their newspapers at home and brought in information from their families. To further strengthen the home/school connection, the teachers sent smaller newspapers (18 inches tall by 12 inches wide white easel paper turned horizontally and folded in half) home during the winter break, inviting children and their families to record anything children thought important—through words, drawings, photos or artifacts. We shared these newspapers with each other after the children returned to school in January.

Our classroom newspaper was also an excellent avenue for fostering connection between children. When a child shared that she was traveling to Lake Tahoe, some of her peers instantly related. Young children often bond through shared experiences and pursuits, which include trips taken, after-school adventures and favorite Bing activities—so the newspaper served as an excellent connection point for our cohort. Of course, as we learned more about each child, our classroom-wide interest in and support of that child also strengthened. When Kaiya shared in the spring quarter, "I went poop in the potty five times," all of her classmates not only could relate but also became invested

NEWS QUOTES FROM CHILDREN

- "I went outside and did ninja stuff eight times. Then I got tired and ate a taco."

 Maeve
- "I got a new dog named Pepper Darling. She's cute and she really likes boys. She's almost the size of an ant." — George
- "I had three birthdays! And then I'm gonna have four birthdays! The Halloween decorations are here. My mom and dad got married at the same time, at the same place." Adam
- "I went to the zoo after lunch yesterday! I saw a lion and a construction site for a bigger place for lions." *Emmeline*
- "I went to Tahoe. It was so fun! But we didn't have our new car then." Rishi
- "I love my mom and dad. When I grow up I'm going to be a dragon. When I get a lot taller I will get wings and a tail and claws." Leo
- "I played tackle football, real soccer and real football. They call me Notre Dame and I did basketball and the construction work is done in 100 weeks." Will
- "I'm going to visit my grandma. And then I'm going to visit my grandma AGAIN!"
 Bowman
- "My mommy gave me the best hot chocolate ever! It had no marshmallows, but it had whipped cream." *Beatrice*

in Kaiya's growing toileting triumphs. The children bravely and openly shared themselves and showed themselves through our newspaper, which in turn made us a tighter classroom community.

When the East AM teachers made the decision to commit to a year's worth of daily newspapers, we had no idea how substantial an impact the *East AM News* would have on every member of our classroom. Our newspapers helped us to learn, think, express and grow as we chronicled a year in the life of our class. **3**

Exploration and Innovation at the Woodworking Table

By Mary Munday, Head Teacher

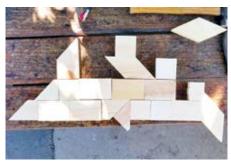


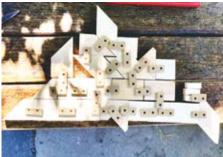






Exploring the Materials Children practice hammering nails into pieces of wood. Teachers may help by holding pliers to keep the nails in place initially.







Planning A child's process: arranging pieces, placing connectors and hammering them into place.

ctivities that include basic materials like blocks, clay, paint, sand and water are central to Bing's curriculum. There is, however, another material that is a staple of our nursery classrooms—wood. On a table on the patio lay wooden pieces of many shapes and an assortment of hammers, nails and other fastening materials. Our master craftsman, Gene Aiken, cuts wood into shapes that children can fit together using tools and their own creativity to plan and carry out their projects.

When the school year began last fall, woodworking was new to many children. Many in East PM observed while others wanted to give the real tools a try right away. Children often began with one piece of wood and a nail as a teacher helped hold the nail with pliers. Over time children became skilled at tapping gently to secure the nails.

Children practice eye-hand coordination as they aim to hit the head of the nail. They focus and build strength as they lift and pound with the heavy hammers. Some may hammer in several nails, while others may use just one, and then return later to practice this new skill. As their skills develop, we often

see multiple pieces being laid out onto the table and bigger plans surfacing.

STAGES OF WOODWORKING

Exploring the materials: Children feel the wood shapes, ask questions about the materials, and move the pieces around on the table arranging them in various ways. They may notice the sawdust or the smell of the fresh cut wood. Observations and questions arise about the protective eyewear, clamps, hammers, nails and the small pieces of pegboard, called bridges, that can be used to connect wood pieces. Children may explore these materials and set right to work, observe or move on and come back at another time.

Planning: At this stage, a child lays out the pieces in a thoughtful manner, moving them to fit how he chooses. In this example, a child chose many pieces and arranged them. Next, he chose the number of bridges that he would need to connect the pieces, and then he set to work gathering nails and hammering them into his project.

Labeling: Children may choose to label their project after completion.

Labeling

Left: "This is a chopper. It can chop things. If you want to do this one (stick near the top), you have to do it super hard. This one (bottom left stick) is very strong, too, because the nail is so strong. You put food under there (the square block) and then it (the stick) chops things." -Sierra

"A tower and when you turn it, a rocket ship." -Nathan



Above: "It's a clock (child spinning the two-hole bridge around)." -Ariana

BENEFITS OF WOODWORKING

Woodworking activities offer many rich and varied opportunities for skill development across all domains:

- · Dexterity, balance, agility and muscle strength
- · Measurement, art, design and invention
- Planning and perseverance
- Eye-hand coordination
- Fine motor skills
- Problem-solving
- Creativity
- **Imagination**
- Independence and self-esteem

- · Matching and classification
- Sorting and comparing
- · Recognition of textures and properties
- Conceptualization
- Cooperation and social harmony
- Respect for tools and materials
- · Increased awareness and understanding of the natural world
- Descriptive language
- Self-regulation

Representational: At this stage, children come in with a goal of creating something specific and then figure out how to accomplish it.



Above: "I'm going to make a machine. The tips are dangerous. It's called Machine Ribbon. I used lots of wood and nails. It can fly up to space. It can drive like a car." —Arthur







Top left: "I'm going to make a rocket ship." -Tara

Top right: "It's a heart that stands up." -Olivia

Bottom left: "I'm going to make my dad!" -Sierra

Three-dimensional: While this stage can be complex for the 3- to 5-year-olds in our classroom, teachers introduced a threedimensional project—building a garden box—and our woodworkers were eager to begin. This project called for many steps and much perseverance and focus. Children could work, take breaks and return when they were interested again. They later painted the boxes, planted in them and then took them home.



Above: "It's a machine that flies to outer space. It helps people that do not have oxygen. The machine gives oxyen. It has a handle that looks like a mountain!" — Arthur

The children in East PM challenged themselves this year with elaborate ideas at the woodworking table. They inspired each other and helped one another through the process. As they built more projects, wood pieces began to come back from their homes to East PM to be used again, honoring the process and the opportunity for a repeated experience. As Sierra, our diligent woodworker, said, "You get better if you keep on doing it." **B**





The Power of Flowers in the Curriculum

By Anna Christiansen, Teacher

he abundant flowers in the Bing yards became a focal point of the curriculum in West PM this year. The flowers not only beautify the school, they also serve as materials for children to use to extend play.

Bing Nursery School founder Edith Dowley wanted the outdoors to be more important to the children than the indoors, which led her to provide the school with appealing grounds "so they would be lured out there." In addition to designing rolling hills in the half-acre play yards in each nursery classroom and planting trees, she also wanted the yards to host odd-looking bushes and trees, such as willows, and odd-shaped flowers, like agapanthus—which look like umbrellas—so children would ask about them. Over 50 years later, Dowley's vision remains central to the child's experience.

A gardening enthusiast myself, I have planted flowers and vegetables at Bing with the children to enhance the environment and have incorporated flowers into the curriculum.

As we included more than 25 flower species in our activities, we saw how experiences with flowers facilitated development of skills and sensitivity toward nature and inspired play narratives over the course of a year. As Dowley elucidated, "We asked them [architects] to plant the trees and the shrubbery so the children had a gratification of the sense of smell and sight—that the seasons' changes were marked."

Through the act of picking flowers, children practiced regulating their behaviors—for example, they learned to refrain from picking so many that they would harm the plant or aesthetic or leave too few for others to pick. They also learned to be mindful of other parts of the plant as they picked flowers and to use a special pinching technique that reduces harm to the plant. They cared for flowers by watering them, understanding it takes work and care if we want them to keep growing.

Following are some examples of flowers in the curriculum:

• At the art cart in the play yard, a 4-year-old boy eagerly chose pipe cleaners and selected a flower from a bouquet on the table.



He twisted them together and created a long structure with the flower at the tip. The final product was "a bee trap," and he went on a mission outdoors to spot a bee and see if the invention would work.

- When the camelias were blooming in January and February, the children used their petals with clay to create new designs. A stem with leaves and a flower became a sailboat's mast. The petals took on new life as wings on a bumble bee. Symmetry was explored as a child designed a heart brick with two petals.
- In April, a child picked a flower, and when a teacher asked a question using the word flower, the child, who is an English-language learner, responded with, "No, it's a dandelion!"
- · Children learned nomenclature and expanded their vocabulary and sphere of knowledge. A child painted "a golden poppy" and stated, "This one glows at night and opens up at night and closes in the daytime,"—an imaginative spin on California poppies.





The trajectory for many children went from drawing their general idea of a flower to drawing a specific flower or being able to understand and use the new knowledge about flowers in play.

• Significantly, a 5-year-old girl who was enamored of flowers decided to write a story about the important relationship flowers have with the sun. The child drew and cut out flowers, adhering them to a craft stick to make puppets. She then reenacted the story with her puppets during story time.

Flowers are omnipresent in the curriculum. In her vision, Dowley stated that there should be lots of flowers, and that children "can gather them, and we always try to see that we have enough that they can do this. And this is the kind of world that we hope they live in." Indeed, a world full of colors, smells, textures and variety in the garden is one we are fortunate to have at Bing. **B**



"This one glows at night and opens up at night and closes in the daytime." -Anna È.

The Intentionality of Aesthetics in Play and Learning

By Marisa Chin-Calubaquib, Teacher

ave you ever wondered why children choose to play in one area of the classroom over others? What do they base their decisions on? Just like adults, children are drawn to beauty in all its forms. Children might notice the colors of certain materials or how they are arranged in the space. Sometimes a simple invitation such as a bowl of seeds and a magnifying glass are enough to attract a child to explore further. Children are invited to use multiple senses as they encounter and examine the seeds seeing, feeling and smelling them, reading the seed packet and more. Having colored pencils and paper nearby can further promote children's investigations. Teachers call these open-ended arrangements of materials intended to draw children's wonder. curiosity and engagement learning provocations. Sometimes a more elaborate provocation might be needed to display the potentials of the materials and prompt wonder in those who pass by, as with ramps, balls and bins.

The natural ways of children include an aesthetic dimension that can be described as a "pursuit of loveliness, of harmony, of balance, poise, equilibrium and sensibility to relationships" through which they make sense of and understand the world and determine what they care for, value and appreciate, stated Italian educator Claudia Guidici in The Hundred Languages of Children. Therefore, aesthetic properties can be highlighted depending on what and how materials are offered to children. Open-ended



materials that can be used in many ways—such as elements from nature, loose parts and recycled items-allow for unlimited possibilities and creativity, in addition to offering children a variety of mediums, textures, sizes, shapes, etc.

For example, as the weather warmed this spring and the children were planting and caring for the West PM garden, a teacher used translucent pattern blocks to make flowers at the light table. Enticed by this novel setup, a child responded by creating flowers using the same pattern blocks in a similar, yet different, way. Another child working adjacent became inspired by the friend's work and began investigating as well. In the quest for beauty, children home in on the details and complexities of materials, in addition to patterns and connections.

When teachers are planning and setting up activity areas in the indoor and outdoor classroom, they think first and foremost about the children's current interests, as well as their developmental strengths and competencies. Teachers also consider the possible processes and logistics of play unfolding, and how best to support what could happen. This may involve the selection of materials and considering how much is available and whether some items are paired together. Whether play should be designated to particular areas, surfaces, and spaces is also on teachers' minds. Using visual and







there is always flexibility, depending on the plans and ideas that evolve.

Small details about the setup can greatly influence children's experiences. For example, the way items are arranged can prompt children to notice and consider certain elements. Even the receptacles to house materials matter: Are the baskets big enough for all the pieces? Can children see over the edges of the bin? Are separate, organized containers for each of the components available so children are set up for success with items that are easily accessible? Teachers also weigh the feasibility of children using the materials independently and consider the level of challenge presented.

By constantly observing how children respond to provocations, much is revealed about their development. Through paying close attention to their play and how they interact with the materials and with others, teachers gain valuable information about what to offer next and how to extend the play. Because Bing teachers typically stay in any given rotation/area for a week, they can adjust as necessary from day to day, or catalog their observations to build on or extend children's learning in the future.

And sometimes, the children initiate and leave their own provocations for peers and teachers to discover—oh, happy day! **B**

Fall Staff Development Day: Radical Empathy and Ethical Song Research

By Chuyi Yang and Jessica Goodman, Teachers

ing Nursery School staff learned about and grappled with the concepts of radical empathy, systems of oppression and ethical song choice at the school's 2021 Fall Staff Development Day.

The event, held Oct. 11, started with a workshop about uplifting empathy. Presenters Bianca Tonatzin Zamora, associate director of diversity, equity and inclusion at Stanford University, and Cindy Cho, a human resources manager at Stanford's School of Humanities and Sciences, walked Bing staff through the different ways in which empathy could help us break down oppressive and discriminatory systems. These systems, such as "old guard" bigotry, sexism, racism, heterosexism and xenophobia are prevalent but often hidden within our society. Addressing them requires individuals to perform great personal reflection and engage in uncomfortable conversations with their peers, they said.

Zamora and Cho highlighted scholar Terri Givens' concept of radical empathy to combat systems of oppression and provide care for those who have been affected. Radical empathy differs from regular empathy in that it encompasses both the emotional and cognitive components of empathy—the way one feels how another feels and the way one understands how another sees the world. Furthermore, radical empathy combines these two aspects with action, requiring one to practice empathy with a focus on making change at both an individual and societal level. Only when this connection is made can we reasonably expect societal change to occur.

Systems of oppression often manifest themselves in the ways we act, think and communicate. Phrases like "they aren't the right fit" or misrepresentations such as "the angry Black woman" are common examples of how discriminatory values have adopted modern, more subtle forms. When faced with microaggressions, misrepresentations and prejudice, we can draw upon the three Ds method—Distract, Direct and Delegate—to intervene. This might include distracting either the harasser or target with an urgent question, directly addressing the harmful behavior or delegating the intervention to someone who can help. Bing staff practiced using the three Ds in scenarios acted out by Zamora and Cho. Staff were able to pause the acted scenarios and share their thoughts on how they would address the situation.

In the afternoon, staff joined a Zoom video conference with Karen Howard, an associate professor of music education at the University of St. Thomas, for a presentation titled "Ethical Song Research." An ethnomusicologist, Howard's work centers on diversity in music, global musical traditions and anti-bias pedagogies. Howard—the editor of GIA Publications. Inc.'s World Music Initiative series of books and an affiliate of the Smithsonian Institute's expansive sonic collection (Smithsonian Folkways Recordings)—attuned teachers to the cultural ramifications of their music choices.

Examining the differences between cultural appreciation and cultural appro-

priation, Howard discussed the necessity of researching the origins, meanings and contexts of songs and music used in our classrooms. Scrutinizing musical selections is particularly important in the early childhood education sphere, as curriculum in this canon is entwined with a history of racism and borrowing from marginalized groups, Howard said. She added that teachers have a duty to acknowledge the cultural implications of chosen material with the classroom. A musical vetting approach ensures that music in the classroom is a medium of empowerment and respect for the cultures and histories from which they came. Researching the songs allows teachers to not only assess their sociocultural appropriateness but also provides information to share with children.

Post-presentation, Howard fielded questions from Bing staff about forming classroom music libraries that are culturally appreciative rather that culturally appropriative. Teachers brought up the Smithsonian Folkways Recording database—an extremely culturally expansive and diverse collection while also a capsule of historically complicated music. One example of this complexity is the "Lead Belly Sings for Children" compilation album of recordings from the 1940s, which includes the folk and blues artist's covers of "Jimmie Crack Corn" and "Pick a Bale of Cotton," both



They're some roses. By Luna H., 5 years 3 months



Watermelon. By Camila D. J., 4 years 6 months

songs entrenched in the United States' period of slavery. Howard spoke to how these songs are important historical artifacts yet should not be shared with children unless the socio-cultural currents of the lyrics will be tackled. If one does not intend on exploring, grappling and making explicit the racism present within such songs, then other musical selections should be made. Howard demands that teachers acknowledge the

background and origin of a song before exposing children to that selection.

The discussions from the day were part of a larger ongoing conversation to promote diversity, equity and inclusion at Bing and Stanford University. As Howard's workshop highlighted, it is important to recognize the role we play as educators and community members. We need to think critically about

the curriculum we introduce into the classroom and understand the history and impact that it can have on children. Recognizing systems of oppression and learning how to address them will help Bing teachers ensure a safe and welcoming learning environment for children and families. As we move forward into the year, we hope to build on this staff development day and create a more inclusive school environment for all. **3**

Winter Staff Development Day: Classroom Design, Creating Environments for Children and Art Workshops

By Lindsay Damiano, Teacher

" s ability the main way we get to know a child? Rather than their characteristics, passions, strengths, loves?"

Guest presenter Todd Wanerman posed these questions to the Bing staff at the staff development day on Feb. 22. The day included a thought-provoking discussion of dis/ability in the early childhood classroom context, community-building art and music activities and continued efforts toward accreditation.

In the first part of the program,
Wanerman spoke about accessibility and getting to know children holistically.
Before turning toward teacher education, he had worked with children for more than 20 years at The Little School in San Francisco, where he helped develop their unique practitioner-based approach to inclusion. Wanerman is also the author of Including One, Including All: A Guide to Relationship-Based Early Childhood Inclusion (with Leslie Roffman and Cassandra Britton) and From Handprints to Hypotheses: Using the Project Approach with Toddlers and Twos.

Wanerman's presentation, "Beyond Challenging: How Inclusive Practices Can Support an Equitable and Effective Program," prompted a discussion about the variety of needs and abilities of the children in our own classrooms. Fortunately, Bing's strengths-based approach to understanding children supports teachers in getting to know children far beyond their abilities or perceived "disabilities." Wanerman encouraged teachers to consider how each child responds to the stimulus load of the classroom, as a stimulus should have learning value or at least a thoughtful intention with the community of learners in mind.

Wanerman also led an exploration of the concept of intentional classroom spaces. We asked ourselves how we might change our classroom settings so they earnestly welcome each child. Every day at Bing, teachers strive to help children make positive connections with one another within a "yes environment." Instead of establishing and enforcing rules for how materials must be used, teachers are open to the children's ideas. This allows children to guide how a material might be used; by changing the premise of what the environment or material is for, we change children's relationships to the space and allow it to become fundamentally theirs.

Wanerman also shared with us what he called The Lesson of the Apple Skin, which further illustrates designing environments accessible for all children in the early childhood context. If a child at



a snack table expresses that she does not like the outside of the apple, a teacher can take her statement to mean a variety of things. If the teacher came from a deficit model, the child might be seen as unwilling to try new things or as experiencing sensory processing differences. If the teacher came from a position of seeking to understand the whole child, the teacher might ask about her family's eating preferences: Maybe they cut the skin off apples at home, or maybe a sibling has an allergy, so they seldom eat apples. Maybe the child comes from a community that doesn't eat many apples, instead preferring the native fruits of their ancestors, which the teacher might ask her about. Showing genuine curiosity about the child's statement not only gives the teacher the opportunity to learn about her but also expresses

interest and commitment to meeting her needs. Additionally, the teacher might learn that a handful of other children at the snack table don't like apple skins either. When teachers prioritize creating a sense of universal belonging instead of helping children fit a determined mold, they create classrooms that inspire and empower all learners.

In the afternoon, teachers and staff enjoyed creative music and art workshops led by DRUMMM Rhythmic Events, an Oakland-based organization. Half of the staff took part in a 40-minute music session led by a music therapist, while the other half took part in a 40-minute art session led by an art therapist. At the end of the sessions, the groups switched



places. In the music session, the facilitator provided a range of drums and percussion instruments as we practiced beats, melodies, songs and rhythmic activities under her skilled guidance. The art group made use of watercolors, colored pencils, and pens as the facilitator led us through a neurographic art experience. Neuro-

graphic art encourages the artist to draw freeform lines as they work with the facilitator to produce a unique piece of art. The activities were designed to inspire, reduce stress, teach new techniques, express our feelings and provide a creative opportunity to come together as a staff.

Finally, our day included conversations and efforts toward renewing our NAEYC accreditation, which you can read more about on page 8.

Through Wanerman's thought-provoking presentation and DRUMMM's workshops, Bing teachers considered important concepts in early childhood education and enjoyed an immersive art experience at the winter staff development day. **B**

Spring Staff Development Day: Dual Language Learning and Examining Systems of Oppression

By Amanda Louie and Mischa Rosenberg, Teachers

uring Bing Nursery School's 2022 Spring Staff Development Day, held on April 22, staff explored two topics: teaching children who are learning English as a second language known as dual language learners—and ways to confront and combat oppression that could affect students and staff.

The event began with a presentation about dual language learning in preschool given by Isauro M. Escamilla, an adjunct professor in the Department of Elementary Education at San Francisco State University and a Spanish and English dual language public school teacher at Las Americas Early Education School in San Francisco Unified School District. Escamilla brought to our attention the identity of dual language learners, those learning in two languages or more. How can we elevate their identity as learners? He asked this question because language and identity are correlated. Research has shown strong evidence that even infants can learn two languages if they have

sufficient support at home and at school, said Escamilla. It's thus important, he said, to offer children multiple opportunities to play with their first and second (and any additional) languages and for teachers to be aware of the importance of helping children preserve their home language to model respect for families and practice inclusivity and diversity.

Escamilla highlighted Personalized Oral Language Learning (POLL) strategies, designed by Linda Espinosa, an authority on the development of young dual language learners, and her colleagues. The strategies include family engagement, environmental supports and instructional supports. Teachers meet with families early on to collect detailed information about their children's language experiences and cultural backgrounds. They share with families the benefits of using the home language for everyday interactions and encourage them to talk about storybooks, memories of childhood and songs in their home language. While not all teachers can

teach in multiple languages, they can support all languages by asking families to translate common words and phrases. Within the classroom environment. teachers provide books, materials and artifacts that reflect a family's languages and cultures.

What does using POLL as an instructional approach look like? Teachers can use "anchor text" via a well-chosen picture book to repeatedly reinforce development in vocabulary and concepts. Escamilla shared a video of himself introducing information about octopuses in a small group to his preschool class, where Spanish is the primary language spoken. While the language of instruction was Spanish in this instance, teachers can adopt POLL strategies in different languages. A child's interest in octopuses spurred this topic. In the video, Escamilla read aloud a page in the informational picture book *Te* Presento al Pulpo (Meet the Octopus) to talk about the concept of an octopus being a marine animal that lives in the

sea (the "intentional message"). The text further describes different body parts of an octopus. Children commented on the pictures and shared their knowledge. Escamilla and his colleagues also created a chant to a familiar tune, integrating key vocabulary words from the text. Teachers considered how they might apply this to classrooms that are predominantly English-speaking, which led to the following idea: Teachers could learn key vocabulary in children's home languages and pre-read the text to help the children learn about the words and concepts in both home languages and English.

Teachers also provided miniature models of octopuses and other marine animals in the water table for children to explore. Children had repeated experiences with these engaging and intentionally designed activities in meaningful ways throughout the week to strengthen their language development.

Another way Escamilla supports dual language learners in his classroom is through children's inquiry of nature in Spanish and English. Teachers can also incorporate drawings, photos and videos about the children's learning to tell stories about their lived experiences. Escamilla cited one of the key principles from "Whariki," New Zealand's curriculum for early learning as an inspiration—that children "learn through responsive and reciprocal relationships with people, places and things."

A snail given to Escamilla's class sparked the children's curiosity in learning about snails. They created a habitat for the snail in a fish tank. Escamilla commented that when encountered with something that is tangible and can be observed (nature as a great example), children became invested. They investigated the mollusk and expressed their ideas through drawing, painting, working with clay, storytelling and making booklets about snails in both Spanish and English. Fourth graders who attended the preschool class and had become fully bilingual in English and Spanish visited the preschool children to read to them

in both languages and served as mentors. In a video documenting the project, children confidently talked about their paintings and shared their knowledge about snails in Spanish and English. Escamilla affirmed research findings that children with a strong foundation in their home language can transfer it into developing English language skills. "That's what we want to do," Escamilla summed up, "uplift their image—whether it's their language, their stories, their identities."

The day continued with a workshop titled "Anti-Oppression and Accountability," presented by Bianca Tonantzin Zamora, associate director of diversity, equity and inclusion at Stanford's School of Humanities and Sciences; and Cindy Cho, a human resources manager at Stanford's School of Humanities.

Children with a strong foundation in their home language can transfer it into developing English language skills.

Zamora and Cho guided staff through an examination of intersectionality as tied to identity and oppression. Intersectional identity encompasses interconnected, interrelated systems—such as race, gender, class and ability—that are aspects of everyone's self. "Identities are not preferences," they explained, "they are who we are." Intersectional oppression refers to the ways that these overlapping systems are used to discriminate and harm through racism, white supremacy, sexism, patriarchal beliefs, classism and ablism. When a person experiences a buildup of such "isms," it can lead to trauma.

"Benevolent discrimination" is one particularly insidious form of oppression because it is both driven and obscured by positive intentions. It's defined as "a subtle and structural form of discrimination that is difficult to see for those performing it, because it frames their action as positive," according to scholar Laurence Romani and her colleagues. Zamora and Cho shared an example of

benevolent sexism in in the workplace: women who are excluded from certain assignments because those tasks were deemed too stressful. This action can counter the supposedly well-meaning intention to protect women by excluding them from opportunities.

Bing staff broke into pairs for a deeper discussion about how systems of oppression can show up in the workplace and in early childhood education. Each pair was assigned one "ism" to narrow the scope of this brief conversation, though inevitably, intersectionality meant that no single system of oppression could be separated from others. Complex topics and questions emerged. For example, within a conversation about sexism, we spoke about gender stereotypes in play. We discussed the importance of allowing for vulnerability as staff members undergo ongoing reflection about our own relationships to intersectional oppression. We dove into conversations about how to best promote an environment for children, staff and our entire Bing community that is not only antioppression, but that embraces inclusion and belonging. Our discussions flowed into the second section of Zamora and Cho's presentation: accountability.

Accountability, in its simplest terms, means taking responsibility for your actions. "When we know better, we do better," Zamora and Cho explained. They offered the following analogy: If you drop an egg, accountability means admitting "I broke the egg" rather than making excuses such as "I meant well" or "That was not my intent." Staff again broke into pairs to practice taking accountability, which requires checking one's ego, listening to learn and acknowledging the impact of one's actions.

Engaging with issues of oppression and accountability was both inspiring and unnerving. Intersectional oppression is distressingly embedded in our world, but hopefully, through self-reflection, empathy and accountability, we can work together to fight "isms" and build a community of belonging and inclusion. **3**

2022 CAAEYC Annual Conference

By Vanessa Ibarra, Head Teacher

ix Bing teachers were among the presenters at the 2022 annual conference for the California Association for the Education of Young Children. The conference ran from April 29 to May 1 in Pasadena and welcomed around 700 participants. The Bing teachers offered three workshops on a variety of topics. Following are synopses of their talks.

Read All About It! Using a Classroom **Newspaper to Build Emergent Literacy, Competence and Community in the Nursery Classroom**

Presenters: Kathryn Carruthers, teacher; Melissa Gier, teacher; Todd Erickson, head teacher

"Read All About It" examined the creation and implementation of classroom newspapers in East AM. Carruthers, Erickson and Gier highlighted the integration of children's emergent literacy, agency and social connections engendered through classroom newspapers. Attendees were invited to look at physical copies of newspapers created in the classroom and then work in small groups to create their own newspaper. For more information on this engaging project, please refer to Erickson's article on page 16.

Spaces, Places and Ecosystems: An Ecological View of Play in the **Early Childhood Classroom**

Presenters: Adrienne Lomangino, head teacher; Emma Vallarino, Manager, Kordestani Program for Parents and Educators

Lomangino and Vallarino demonstrated how the early childhood environment can be viewed as an ecosystem when educators consider space and place. Children bring their own meaning to classroom spaces, transforming them into places through play, imagination and interaction. By taking an ecological approach to examining children's play,

teachers gain insights into how children make sense of the world. The presenters described ecology as "a place of interrelationships," drawing on the perspectives of scholars Jane Perry and Lisa Branum. Children's play includes an evolving, reciprocal interplay between themselves and the physical and social environment within a classroom ecosystem.

Educators were invited to analyze and reflect on their respective outdoor play areas by mapping out places and ecologies. They then considered the following: "Where are your classroom walls? How do you envision children's time outdoors? What is your role?" This enabled participants to better understand the importance of children creating places that are meaningful to them.

Lomangino and Valarino paid special attention to how a space becomes a place for children. Children bring a school's outdoor environment to life. They create meaning through the act of carving out spaces for themselves away from the adult world. They feel safe in secret little places and feel a sense of meaning and belonging. Children should be offered the freedom and space to create special places in their outdoor environments.

The presenters shared three examples of outdoor environments at Bing that offer children opportunities to create places through play: the redwood grove area in Center Room, the hidden sand area in East Room and the bridge in West Room.

Attendees were also invited to draw a second map of their spaces, this time adding more details from a child's perspective. Lomangino asked the following questions to spark reflective thinking from the attendees: "What are the affordances of your outdoor play spaces when seen through the eyes of children? Is it their space? What types of things can they do there?" This thoughtprovoking exploration produced many ideas among participants, who shared their new insights on the importance of empowering children's place-making.

There's a Beat When I Speak, A Song When I Sing and a Groove When I Move! Let's DO IT!

Presenter: Mara Beckerman, music and movement specialist

"Come On In" Come on in, we're all in a FAMILY Let's begin and sing a little HARMONY There's nothing to be worried about —Oh No Together we can figure it out So won't you (clap, clap) Reach for a friend and SWAY along Ba-Dum, Ba Ba, Ba-Dum, Ba-Dum,

Ba-Dum ... —Unknown artist

In her presentation, Beckerman discussed how children's early experiences of music and movement strengthen their social and emotional skills, coordination and motor skills and their language acquisition. A highlight was Beckerman's description of a study conducted by Laurel J. Trainor and Laura Cirelli exploring how moving to music can be a social experience for young infants. Trainor and Cirelli believe that interpersonal synchrony is a key component of musical behavior and can strengthen social connections. Interpersonal synchrony refers to instances when the movements of two or more people overlap in time and form.



By Bowman R., 4 years 1 month

In a study to examine this idea, an infant was placed in an infant carrier worn by the assistant. The infant was then gently bounced to music while facing the experimenter, who bounced in synchrony or out of synchrony with the infant. Researchers measured the infant's helpfulness toward the experimenter by observing whether the infant tried to help the experimenter complete goals, such as drawing pictures with markers or pinning up dishcloths on a clothesline. In each trial, the experimenter dropped the object she needed to complete the task. The infant was given 30 seconds to respond. This study found that by 14 months of age, infants who were bounced in synchrony with an adult subsequently behaved in a more helpful manner by handing back objects the adult "accidently" dropped, compared to infants who were bounced out of synchrony with the adult.

Trainor and Cirelli's findings suggest that interpersonal synchrony significantly influences the social behavior of 14-month-olds. Singing, dancing and clapping promote socially cohesive behaviors between infants and caregivers. Synchronous movement between infants and adults increases 14-month-old infants' helpfulness. Furthermore, Beckerman also shared research by

Dr. Debby Mitchell, EdD, of University of Central Florida-Orlando. Mitchell found a relationship between rhythmic skills and academic performance in a study of first graders.

Beckerman sang songs in different languages, demonstrated to attendees how to use their bodies as musical instruments and used percussion instruments (shakers, sticks, etc. or even found objects) to find beats (i.e., syllables) in words and turn them into rhythms and movement. Beckerman's presentation had attendees laughing, singing, clapping and reimagining their music curriculum.

EVENTS AND INFORMATION

Kindergarten Information Night: The Beginning of a Wonderful Adventure

By Paloma Moreno, Teacher

he transition to kindergarten may conjure up mixed feelings and questions for parents. Parents may wonder: What does it look like to be ready for kindergarten? And what are some strategies to support my child with this transition from nursery school? On Jan. 12, Bing Nursery School held its annual Kindergarten Information Night to address the topic for parents. Due to COVID-19, the event took place via Zoom instead of in person, and 65 parents attended.

The event began with head teacher Adrienne Lomangino providing general information regarding kindergarten eligibility, registration and requirements. Head teacher Todd Erickson reminded parents that kindergarten is a new beginning and the start of a wonderful adventure. He noted nursery schools are the connection between home and school, where children deepen their sense of self, learn to be part of a larger group and build on skills that will prepare them for kindergarten. Erickson recommended to par-

ents that they not worry in front of their children about kindergarten but spend the next months cherishing their time together and playing with them at home.

Lomangino presented data from a survey of former Bing parents and their experiences throughout the kindergarten transition in 2021. The survey asked parents about their children's initial feelings regarding kindergarten before it started and then how they felt about their experience a few months in. From a total of 56 responses, 84% of the students were either excited or somewhat excited to start kindergarten. A few months into the quarter, 88% reported feeling excited about school. Of all the parents who completed the survey, more than half described the transition as easy and said that it became easier as the quarter progressed.

Emma Vallarino, manager of Bing's Kordestani Family Program for Parents and Educators, joined Lomangino to describe the base tier of fundamental readiness skills, or "basic building blocks," for kindergarten: self-care, motor skills, self-regulation and social expression. Vallarino cited findings from a study of school readiness in San Mateo and Santa Clara counties titled "Are Children Ready for School?" Included in this study is a pyramid-shaped diagram that depicts these skills as the foundation on which academic learning is built.

Vallarino noted the ample opportunities children have at Bing to practice and build on motor skills. From running up and down the hills to using paint brushes and molding clay, children are refining their gross- and fine-motor skills through play. At home, children further develop their independence and self-care skills—both of which support children's autonomy. "Practicing skills such as dressing, eating and toileting will not only make children feel competent but also confident," Vallarino said.

The next tier of the pyramid is composed of self-regulation and social expression.

Emotional awareness, the capacity to express oneself, and control over one's emotions, which are aspects of these abilities, allow children to connect with others and respond to social cues. These skills are largely learned through experiences, said Lomangino, and are practiced daily at home and at school. To further support navigating emotions, she suggested talking with children about emotions and labeling them.

Self-regulation is a social and emotional skill that children—and adults—are constantly learning. This is a domain in which we learn to follow routines. delay gratification and develop a strong sense of self. Adults can support their child's skill by setting clear expectations and supporting the child to set and reach goals, Lomangino explained.

Language development and communication ability are also key for kindergartners, said Vallarino. It is important for young children to have the ability to

express their ideas and needs and engage in a back-and-forth conversation with peers. These skills are useful during recess or in the play yard, especially when adult presence is limited.

The final learning domains Vallarino addressed were literacy and math, which are at the top of the pyramid. At Bing, children explore early literacy skills and ideas about numbers. They have lots of opportunities to create picture books and stories and to contribute to activities such as a classroom newspaper. They also experiment with words and sounds when they play games at snack time. Additionally, children often engage organically with numbers, counting and patterns through their play. The teachers create an environment that promotes learning math and literacy through play, all while fostering children to be curious and building a love for learning.

Kindergarten Information Night concluded with practical tips to help

parents prepare their children for kindergarten. Lomangino said it is important for parents to have a balanced conversation with their children about kindergarten. "Keep it minimal to reduce anxiety," Lomangino explained. Additionally, head teacher Nandini Bhattacharjya informed parents that it is important to provide children with "down time," as transitions may be different for each child. Moreover, if children are tired after a long day at school, parents can help them decompress by providing a warm sanctuary at home and not overscheduling their child in the first few months of school. Lastly, Bhattacharjya suggested that parents partner with the school by introducing themselves to the teacher and getting involved in the school. She concluded by encouraging parents to have a positive mindset that the transition would be successful. They would be transferring some of that energy to their child and showing confidence in their child's competence. **B**

PUPPET SHOW AND MUSICAL EXPERIENCES

The Fratello Marionettes captivated children with their artistry and storytelling in June, performing 15-minute mini puppet shows for each class in Bing's atrium. The puppeteers also shared how to manipulate marionettes and answered children's questions.

A band consisting of Bing associate director Beth Wise (playing the guitar), Bing music and movement specialist Mara Beckerman (ukulele), former Bing parents Leslie Hart (French horn) and Ben Wang (cello) and Bing head teacher Todd Erickson played and sang with children during mini children's fairs held in each classroom May 12 and 13.







ASSOCIATE DIRECTOR BETH WISE WINS DEAN'S AWARD IN LEADERSHIP

Beth Wise, Bing Nursery School's associate director and an inspiring presence at the school for more than 30 years, has won the 2022 Stanford School of Humanities & Sciences Dean's Award of Merit in Leadership.

Recipients of the award demonstrate strong leadership and outstanding performance in their position. "We are so pleased that Beth has been recognized for her commitment and unwavering dedication to our community including children, families, staff, Stanford students and researchers," said Jennifer Winters, director of Bing Nursery School and a lecturer in the Department of Psychology.

Wise has held many roles at Bing: teacher, head teacher, music specialist and, for the last 13 years, associate director. She is also a lecturer of one of a few Stanford undergraduate courses offered at Bing—Psychology 147: Development in Early Childhood.

When nominating Wise for this honor, Winters wrote: "The leadership of Beth Wise really shone through in operating Bing amid all of the challenges and changes during a second pandemic year. As associate director, she

provided steady, trusted guidance and unwavering effort to ensure the school served the maximum number of children and families while maintaining the highest levels of health and safety standards. Her growth mindset on solving problems in an ever-changing environment set an example for all of our teachers and staff."



"From working with the children in the classroom and modeling quality interactions, to helping a parent worried about separating from their child, she consistently offered sage and authentic advice and is a model of good practice. She truly led from the front," Winters added.

One colleague wrote, "Her patience in listening and problem-solving through challenges serves as an aspirational example for our whole staff. Beth also recognizes that leadership requires decision-making, sometimes making difficult decisions. Navigating the needs of staff and families through the pandemic has been a feat of flexibility, judgement and persistence."

Beth Wise Reflects on 30 Years at Bing

In honor of Beth Wise's recognition, we asked her to reflect on three decades at Bing. Below, she talks about balancing children's need for support and independence, learning how to "wonder" with a child and that time she turned Bing into a full-fledged recording studio.

What did you find most rewarding about your time at Bing?

I have had the opportunity to work with many children and families, witness the magic of childhood, and enter a world so precious and with such potential. Our founding director, Dr. Edith Dowley, guided teachers to have "faith, hope and trust" in children. When you follow those principles, the rewards become clear; getting to know children as the unique, capable, kind and empathetic individuals they are.

As a talented musician and storyteller, you've strongly advocated for children's exposure to the arts. Tell us about that.

As a child, I was fortunate to have lots of time to play, try various musical

instruments, listen to many genres of music and experience the freedom of movement we advocate in our teaching at Bing. This appreciation of the arts and the creative process is intertwined with how I work with children and is a core part of my teaching philosophy.

When I became the music specialist at Bing, I had an opportunity to record a music CD with the skilled expertise of sound engineer Lars Hidde and assistant recording engineer Heidi Verlaine. We set up a recording studio in Bing's multi-purpose room and invited children, families, teachers and community members to collaborate on songs performed and recorded at Bing. The project's beauty was that the proceeds of sales of the CD went directly into the Bing Scholarship fund

and helped provide opportunities for more children to attend Bing. Over several years, we produced seven CDs that were sold and have now been digitized for enrolled Bing families to enjoy.

I then worked with Jingdong Cai, the former director of orchestral studies at Stanford, director Jennifer Winters and research coordinator Chia-wa Yeh to launch the Bing Nursery School Performance Series for children. The concerts were held on the Stanford campus at Dinkelspiel Auditorium and the Bing Concert Hall. The series aimed to introduce young children to the performing arts and expand their knowledge of different cultures through music and dance to set the stage for a lifelong appreciation of the arts. An outreach Continued on page 31

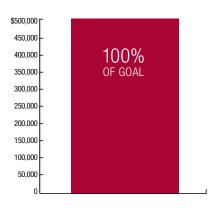
2021–2022 ANNUAL FUND REPORT

Thanks to the contributions of Bing parents, friends and our staff members, we met our goal of \$500,000 to help support our annual budget. We are truly grateful for this generous support. We would like to extend a warm round of thanks to the Annual Fund Co-chairs Liza Wang and Jerry Luk, Niloofar and Navid Mansourian, Robyn and David Reiss and Mubarik Imam and Talha Sattar. We reached 51 percent family participation this academic year.

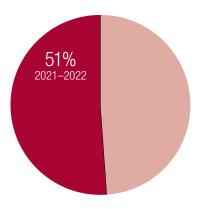
The Annual Fund is an important part of the school budget. It supports general school operations, scholarships, emergency funds and our endowment. The

Annual Fund helps us close the gap between tuition and the actual cost of supporting the exceptional programs Bing offers children and families. Your gift supports the school's programs and initiatives such as high-quality classroom materials, parent seminars and coffee talks, additional teachers in the classroom and teacher development. Our goal is for every family to participate in supporting the school—no gift is ever too small.

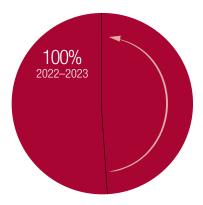
In 2022–2023, we are striving to increase our current family participation! Please make your gift at http://bingschool.stanford.edu/giving/annual-fund.



Total 2021-2022 Annual Fund Contributions



Participation of Current Bing Families



Target Participation for Bing Families

Beth Wise Reflects on 30 Years at BingContinued From page 29

effort enabled us to provide free tickets and transportation for over 100 families per show to children who might not otherwise be able to attend. The shows were open to the public and ranged from dance, theatre, symphonic performances, jazz, multi-media performances, marionettes and more. We held our last show in October 2019, and after a long hiatus due to the pandemic, we hope to present more concerts in the future.

Your ability to connect with children is exceptional. Tell us about your approach to talking with them.

First of all, thank you for that comment! I believe that I have learned how to listen, show genuine respect for children and quietly recognize and value who they are and how hard they are working on learning all the skills they need to succeed. Children want support but also

value independence and trying things out for themselves. Recognizing that balance gives them a sense of autonomy and builds trust in knowing a caring adult is there to step in when needed.

You have also co-taught the Stanford course Psychology 147: Development in Early Childhood, which is held at Bing. How was your experience working with undergraduates?

It has been an honor to work with the Stanford students. They come to the class with a desire to understand how children process the world, develop skills and dispositions, and they then get an opportunity to work in Bing classrooms. As the quarter ends, the students invariably learn so much from the children and are in awe of how deeply caring, competent and kind they are. We often have students who stay with us after graduation and become teachers for a few years before taking their next academic or career steps. I find

that especially rewarding since they are learning to value and understand young children and weaving that experience into the fabric of their work and life.

Did your experience at Bing impact your parenting and vice versa? If so, in what ways?

My experiences as an educator helped me value the world from a child's perspective and empathize with all they need to learn along the way. One of my favorite things that I learned as a teacher was to take time to "wonder" with a child. When there are problems, obstacles, challenges, questions and concerns, the simple act of being there in mind and spirit and saying, "I wonder what we could do?" or "I wonder why that happened?" opens a dialogue and shows a level of support that is nonjudgmental, models curiosity and makes room for conversation. As a parent of two children (now adults), we often "wondered" together to imagine solutions and solve problems. **B**

Bing Nursery School's 33rd Annual Harvest Moon Auction

Bing goes to

Saturday, November 12, 2022 • 6:30 p.m. Frances C. Arrillaga Alumni Center 326 Galvez Street, Stanford University

Scan the QR code to

- Support the Bing Scholarship Fund
- Shop our bazaar early by visiting the Online Auction, open Oct. 19 Nov. 1
- Make reservations. Invitation link will be open on Oct. 14



All proceeds benefit the Bing Nursery School Scholarship Fund

Planning for an in-person event.

Virtual if necessary.