Why Blocks Continue to be a Cornerstone in the Curriculum

By Jennifer Winters, Director

The year 2013 marks the 100th anniversary of the unit block designed by Caroline Pratt in 1913. After a century, unit blocks remain one of the most integral and fundamental materials used in early childhood classrooms today.

The basic unit block is very accurately cut to be 5 1/2 inches by 3 3/4 inches by 1 3/8 inches. Additional blocks in a set are all multiples or fractions of the basic unit. For instance, a half-unit block is exactly half the size of the unit block and a double unit is twice the size of the unit block. All together a typical set includes more than 20 additional shapes i.e., triangles, ramps, arches, pillars and cylinders. All are made of a hardwood, like maple, and are unpainted and unadorned.

Unit blocks are ideal for our classrooms because they are open-ended, developmentally appropriate, challenging for children of all ages and offer limitless opportunities for creativity, making discoveries and acting on ideas. Unit blocks stimulate a child’s development across a wide array of domains —cognitive, emotional, social and physical.

It is interesting to note that the founding director of Bing Nursery School, Edith Dowley, saw the immense value of using unit blocks in the classrooms and she also used them to demonstrate to the school’s architect (Birge Clark) her vision for Bing’s indoor and outdoor environments. Since Bing opened its doors in 1966, unit blocks have stood the test of time as one of our five basic materials (blocks, clay, paint, sand and water) available to children to use daily in all of our classrooms.

Pratt was the founding director and visionary of City and Country School in New York City, which opened in 1913, and designed the unit blocks as part of her curricula. While Pratt may not be well known outside the field of early childhood education, her work paved the way both for how young children should be educated and for the optimal environment to meet their needs. Initially, with the help of a pediatrician, she developed unit blocks to help children develop their upper body strength, but she soon realized that they supported children’s social-emotional and cognitive skills as well. In her autobiography, I Learn From Children, she stated, “Crayons, paper and scissors and paste were obvious. What I sought was something so flexible, so adaptable, that children could use it without guidance or control, I wanted to see them build a world, I wanted to see them re-create on their own level the life about them, in which they were too little to be participants, in which they were always spectators.”

Pratt believed strongly that open-ended materials, like blocks, are essential to help the child understand and recreate the world around them. Pratt’s philosophy of education was greatly influenced by the progressive movement and likewise the work of John Dewey, Jean Rousseau, Johann Pestalozzi and Fredrick Frobel.

The basic tenets of her philosophy:
- Curricula should be “child-centered”
- The teacher is a creator of the learning environment and a guide in the learning process
- A sense of community is essential in the classroom and within the school
- The process of learning, more than the products of learning, should be emphasized through exploration and experimentation
- A variety of arts are included for both creative imagination and self-expression
- Innovative subjects such as domestic science and nature study were also part of the curriculum.


At Bing, our philosophy is similarly child-centered and uses open-ended materials, including unit blocks, as a vital part of our curriculum. We see our classrooms as a community of learners where teachers are guides and facilitators, and children are seen as individuals as well as members of a group, creating and discovering on their own and with their peers. Children are also given uninterrupted time to explore, engage and invent. For young children, learning is not necessarily a linear process.
It takes time for young children to act on their ideas and to draw their own conclusions and be satisfied with them. But learning something well also requires adequate space and appropriate open-ended materials that children can use to create their own world. Because young children are often more physical than verbal, blocks provide an excellent open-ended medium for communicating and playing out their ideas and for developing cognitively, socially, emotionally and physically.

Blocks challenge and develop children’s cognitive processes, particularly their mathematical, scientific and language skills. As young children begin to develop logical thought, thinking and reasoning skills, they need materials to manipulate and handle. For instance, when young children use blocks to build roads, bridges and enclosures, they are also developing the abilities of estimating, measuring and gauging spatial relationships (inside, beside, together, on top of, over, under). Increasingly more elaborate structures call on greater understanding of the scientific principles of gravity, stability and balance.

Inclined planes engage children in trial and error, making predictions as well as cause and effect. Questions such as “What would happen if...?” stretch children’s critical thinking. Telling stories about the buildings, naming them, making up signs, and relating ideas and questions to peers and teachers strengthen children’s language skills and creativity. The adult or teacher’s role is to model problem solving by helping children articulate the problem and guiding a discussion of possible solutions.

Much of this development is evident in observing Aham, who works diligently to respond to a challenge from teacher Nancy Howe: Can he build Center Room out of unit blocks? This question is well-suited for Aham, an observant and thoughtful older boy.

Aham studies the room’s physical space and begins by using flat boards to create the floor and one-unit blocks turned on their sides to make the walls. “What else is in our room?” asks Nancy. “Tables,” Aham responds. “Hmmm, what could you use to make tables?” wonders Nancy. Aham considers the various blocks at his disposal, then picks rounded blocks to build Center Room’s round tables and one-unit blocks to create the classroom’s square tables. This process continues as Aham investigates different areas of the classroom and then uses unit blocks to represent what he sees. Throughout, Nancy gently challenges and supports his steady work.

Blocks also contribute in many ways to children’s social and emotional development. The boost in children’s self-confidence as they complete their structures can be seen in their smiles and body language. Most importantly, building with blocks is a deeply satisfying activity that a child can explore over and over again. Cooperating, taking initiative and respecting the work of others are also brought into play with blocks when two or more children work together. In child-centered classrooms such as Bing’s, children’s development of communication skills leads to cooperative learning and inclusion.

Gabe attempts to build a tall block structure but it falls down repeatedly. Noticing his growing exasperation, teacher Todd Erickson joins him on the rug. “You look frustrated. What’s happening?” As Gabe describes his building challenge, Todd notices that the problem emanates from the bumpy surface of the rug in the block building area. Todd quickly enlists the help of the nearby Alexi, an experienced builder. “Alesi, Gabe is having trouble making his structure stand up. Can you help him?” Alexi demonstrates to Gabe how to use a unit block as a solid, flat base from which to build a tall tower. “Alexi, would you like to build with me?” asks the excited Gabe. Alexi agrees and the two happily begin to build together.

Young children learn primarily through movement, so the use of blocks also promotes physical development. Blocks greatly enhance development of large and fine motor skills, eye-hand coordination and visual perception as children determine how to manipulate the materials in both large and small spaces. Learning how to place a block in such a way that other blocks can be stacked (or balanced) on top of each other might sound simple, but it is foundational for these developing skills. Whether a child is reaching or stretching across a space or learning how to stack blocks in vertical or horizontal rows, they are strengthening skills that will improve their coordination in both the large and fine motor domains.

A glimpse of how this plays out can be seen in the play of Angela: Angela slowly stacks unit blocks on their side to create the beginnings of a wall. As she delicately staggers and balances the placement of each block, much like a bricklayer, her work attracts the attention of her friend Indira. “Would you like to join her?” asks teacher Jasmine Dobbs-Marsh. “Angela, can you tell Indira about your structure?” “It’s a house,” answers Angela. Indira watches for a minute then offers an idea. “I’ll make the other wall,” she says. Indira adopts Angela’s technique to create a parallel wall just a foot or so away from Angela’s wall. The two builders work carefully, balancing each row of blocks atop the previous in an intricate pattern. When the walls reach nine rows high, the girls connect the two parallel walls with two adjoining walls to make an enclosure, which becomes a house, before moving on to its interior design.

As wonderfully simple as they are, blocks engage and stimulate the whole child—body, senses, emotions, cognitive processes, creativity and social interaction. According to Pratt, a more open-ended, flexible and constructive medium could hardly be imagined. The architect, Frank Lloyd Wright, wrote about the influence of his childhood experiences with blocks: “The smooth, shapely maple blocks with which to build, the sense of which never afterwards left the fingers: so form became feeling.”

Speaking from personal experience, as a child I loved having time to build with blocks in kindergarten and in our basement at home. Later when my mother was a director of a nursery school and I was a teenager, I remember stacking and organizing these smooth maple blocks in her school and appreciating the precise and accurate way they all just fit. When my son was born 31 years ago we saved so that we could buy him his very own set of unit blocks. The blocks continue to be passed down to the next generation.

In looking forward to the demands that will be made on our children as 21st century learners, I cannot think of a better material than blocks for igniting creativity, innovation and imagination. Blocks are an ideal material to foster communication, collaboration, problem solving and self-esteem. These qualities will help develop a disposition for learning that will prepare children for the demands our society will impose. I am confident that the many attributes that blocks afford young children will ensure that they will be celebrated for the next 100 years and beyond.
The thrilling beginning of nursery school also marks the dark onset of the Parent-Child Food Wars. The toddler who once ate everything you put on his plate, as long as it was the rocket ship plate, **not** the rabbit plate, has turned into a preschooler who also insists on choosing the food on that plate. And there is an unusual consistency to preschoolers’ preferences—a united scorn for vegetables. Attempts to bribe, threaten or plead end with score Parents: Love; Preschooler: Beets On Floor.

Once upon a time, there was a Primitive Preschooler who would eagerly eat all kinds of plants, but he perished from a poisoned mushroom, as in *Babar*, or a deadly plant or berry. And so picky Primitive Preschooler had the selective advantage and those picky-eating genes were passed to your son. Your little boy knows beets are dangerous: That’s why he took care to fling them into the far corners of the kitchen.

In this year’s Bing’s Distinguished Lecture, renowned researcher Ellen Markman, PhD, the Lewis M. Terman Professor of Psychology at Stanford, shared the insights into this vexing problem gleaned from her remarkable study on teaching young children about nutrition.

Childhood nutrition is a subject of urgent public concern. The American Medical Association has recently reclassified obesity itself as a disease, rather than a condition. Obesity has more than doubled in children and tripled in adolescents in the last 30 years, with diabetes and other obesity-related illnesses sky-rocketing correspondingly. And no wonder American children are obese: They consume half of their calories from added fat and sugar; less than one in five eat the daily recommendation of vegetable servings, and—surprisingly—less than one in six of fruit. “Many think this will be the first generation in [our] history to have a shorter life span than their parents,” Markman said.

There is a consensus among health researchers that it’s better to intervene in this problem early, as food preferences tend to become more firmly entrenched and difficult to change in adulthood. Yet, Markman explained, the strategies that many parents (including me) employ to get their children to eat Good jicama rather than Bad Doritos turn out to be ineffectual or even counter-productive. Research has found that what labeling Doritos Bad really teaches children is that their parents are trying to withhold Doritos and that therefore Doritos must be extremely desirable. Perhaps Daddy just wants to keep all those Doritos for himself! Clearly, he’s eager to pawn off the jicama. Attempts to teach calories or portion control have also been shown to be problematic.

Brainwashing, I know from personal experience, washes right off a young child. I had always told my own children that the chocolate milk they see at Starbucks was yucky: Milk tastes better when it’s white, which is funny because bread only tastes good when it’s brown. This succeeded in stopping my 3-year-olds from grabbing the chocolate milk containers at Starbucks, right up until the day a babysitter gave it to them and they couldn’t wait to come home to shout, their overlapping voices giddy with the pride and excitement of a new discovery, “Mommy—chocolate milk NOT YUCKY! My love chocolate milk!” My son proclaimed an urgent need to go out and buy some, while my daughter reassured me that I, too, would like chocolate milk. (“You try it, Mommy.”) Since it seemed clear that responding, “Well, O.K., yes, fine, it tastes good—I lied about that!—but trust me I’m telling the truth now, it’s bad for you,” would clearly only further undermine my parental credibility, I folded. Parent:

**Acknowledgement**

Bing Nursery School would like to thank Melanie Thernstrom for contributing an article on this year’s Bing Distinguished Lecture. Thernstrom’s children, Kieran and Violet Callahan, attend Bing School currently. Thernstrom is an author and contributing writer for *The New York Times Magazine*. Love; Preschooler: Chocolate Milk Won.

What about bribery? Alas, research conducted at Bing by Stanford psychology professor Mark Lepper, PhD, has found that giving presents as rewards for eating teaches the children that certain foods are so unappetizing that they need to be rewarded for trying them. In short, Markman explains: if a parent says, if you eat some delicious salad, then you can have some more pasta, guess which food they are going to conclude is actually delicious? Indeed, an experiment has found that if you tell children that one drink is a healthy drink and one isn’t *when they are actually the same drink*, children will say afterwards that the non-healthy one tastes better.

**Argh! So what does work?**

Markman wanted to test whether giving children a conceptual framework for understanding nutrition would empower them to make healthy choices. In doing so, she would be going against the conventional wisdom in the field. “Nutrition education for preschool children is one form of ‘knowledge-based intervention,’” she explained, and “there is widespread skepticism in the field about the benefits...”
of knowledge-based interventions.” After all, we all know that knowledge of what we are supposed to eat does not necessarily change our eating habits. We know we are supposed to eat fruits and vegetables every day, exercise, not smoke, cut down on salt and sugar, blah, blah, blah—but we ignore it.

As a result, researchers have turned to so-called stealth interventions—trying to construct an environment that achieves healthy-eating goals without nutrition education. For example, it has been shown that in a school cafeteria, the order in which food is laid out can affect what choices are made. If healthy food is offered first in a buffet, children are more likely to take it. Serving food on smaller plates has also been shown to control portion size. Teaching children how to grow or cook vegetables can make them more excited about trying to eat them.

But teaching children about nutrition has been thought to be useless. A federal report from the Centers for Disease Control, “Guidelines for School Programs to Promote Lifelong Healthy Eating” concluded: “Young elementary children might not… understand abstract concepts such as the nutrient content of foods.” Therefore, the panel advised, rather than teaching them about nutrition, interventions “should focus on concrete experiences such as increasing exposure to many healthy foods.”

Markman disagreed. “The work we’ve done has been based on a new view of cognitive development, and that is cognition, even in very young children, is theory-based.” Contrary to the long-standing belief that young children are only capable of concrete thought, research in cognitive development in young children has increasingly shown that, as Markman put it, “throughout development children create coherent belief systems, intuitive theories that can predict, explain and act upon the world.”

Yet most interventions designed to improve the health of young children are based on the outdated model of children’s minds. Markman’s goal was “to design a nutrition education program based on state of the art research on cognitive development”—an approach that did not teach facts children likely would forget or rules they would want to defy, but explanations that engaged their own cognitive powers. Her goal would be “to build on children’s incipient knowl-
edge and to help them understand the importance of eating a variety of healthy foods.” She believed that learning about nutrition was not in competition with stealth interventions, but rather would provide a better foundation for them.

She and her collaborator, Sarah Gripshover, a graduate student in psychology, began by interviewing children to find out what they knew about food. They found “children have worked out you need food, it helps you grow, that it goes in your stomach, but who knows what happens until you excrete it.” Some young children believe that food gets literally stacked up inside you and that is what makes you grow taller.

They decided to do two inter-related studies. For both studies they took a group of Bing preschoolers who were 4 to 5 years old and divided them into a group that would receive nutrition education and a control group. For 10 to 12 weeks, the children in the intervention group were read materials about nutrition a few times a week at snack time. The children were taught that food contains invisible things called nutrients that are necessary to live and grow. The stomach breaks food down, and blood carries the nutrients throughout the body. Different foods have different nutrients and the body needs to have lots of different nutrients. In one of the studies, the control group received no nutrition education; in the other the control group were read materials that followed a U.S. Department of Agriculture guideline for nutrition education.

Markman and Gripshover did not know if the study would actually change children’s food behavior, but they decided they would monitor snack time in hope that it did. Each concept was conveyed through analogies children immediately grasped. For example, on the importance of variety: If Sally likes shoes, can she wear just shoes? If Tom likes handlebars, can he build a bike using only handlebars? Johnny wants to eat lots of broccoli and nothing else (as if) would that be good for Johnny? If a puppet had only broccoli on his plate, should the children give him more broccoli or should they give him some chicken? (Markman actually pointed out that the food examples were designed to use broccoli, a canonically healthy food, to drive home the importance of variety.)

At the conclusion of the study, they interviewed all the children. The children who received the intervention demonstrated a good grasp on how the body uses food, declaring, for example, that the purpose of blood is “to carry our nutrients around our body so we can do something.” Illustrating Markman’s point that children are natural theory makers, it turned out that children who did not receive the intervention had also formulated ingenious theories about the body, such as that the purpose of blood was to warn you, “when you pick your nose and blood spurts out, it is warning you not to pick your nose,” (my favorite) or that we have blood because “Dinosaurs love to eat blood. And if you didn’t have blood in this world then dinosaurs to die.” This would be bad, he reasoned, because then we wouldn’t have dinosaur bones and museums!

Of most interest to parents, they discovered that the children who had received the intervention not only learned about nutrition, but that that knowledge had actually translated into them choosing to eat—yes!—more vegetables at snack time. Significantly, at no time had the children been instructed to eat more vegetables or told that vegetables were especially healthy. The children who had received the intervention had apparently reasoned that the vegetables offered nutrients they needed because their bodies needed all different types of foods, and thus had helped themselves to the food they once would have left on the platter. Sign me up.

Of course, at Bing snack time, the children are choosing among a variety of healthy foods, so simply increasing variety is necessarily a nutritional gain. But in the fallen world outside Bing, the choices may include candy, chips and devious fruit-flavored soda—and I am confident my own children would like to include every variety of those in their diet. How can we design parental interventions that won’t backfire but convey that not all foods are equal and certain foods are so deficient in nutrients and loaded with bad things that they are barely foods at all—beginning with chocolate milk? Professor Markman—please?

Markman and Gripshover’s paper, “Teaching Young Children a Theory of Nutrition: Conceptual Change and Potential for Increased Vegetable Consumption,” was published in the June 26, 2013, issue of Psychological Science.
The opposite of play is not work, but depression.—Stuart Brown

Stuart Brown, MD, a pioneer of research on play, believes that play is essential for both children and adults to maintain and even increase happiness. “Beyond play’s role in our personal fulfillment,” Brown told Bing staff, “its benefits have profound implications for child development and the way we parent, education and social policy, business innovation, productivity and even the future of our society.”

Brown, author of Play: How it Shapes the Brain, Opens the Imagination, and Invigorates the Soul, is the founder and president of the National Institute of Play. Brown is the founding clinical director and former chief of psychiatry at Mercy Hospital in San Diego, Calif. He first discovered the importance of play through his clinical research. As a play-based program, Bing invited Brown to share his research on play. He presented to the Bing staff at the Tower House on Sept. 6, 2012, as part of set-up week for the school year.

Brown defined play as a state of mind, as an absorbing, apparently purposeless activity that provides enjoyment and a suspension of self-consciousness and sense of time. Play is unscripted, spontaneous and an exploration of the possible. There are many different types of play: social, aesthetic, fantasy, narrative, ritual, parallel, or rough and tumble, to name a few. Regardless of the type, play is rewarding. Play nature is embedded in all animals for their entire life span. Indeed, play has been observed in video footage of polar bears, dogs, birds, koalas, monkeys and other animals. Humans are motivated to find good reasons to honor the play state because it is enjoyable and rewarding.

Play affects the brain’s prefrontal cortex and therefore impacts judgment, planning, self-regulation and abstract thinking. Through play activity, we can test theories safely without threatening our physical or emotional well-being. This allows us to learn without necessarily being directly at risk. Additionally, human trust is established through play signals. Vocal, facial, gestural and body signals in collective play give humans a sense of safety by helping identify differences between play and other states such as aggression. Play also gives humans a sense of belonging and an establishment of community.

Play is instrumental for humans to explore and find one’s interests. It allows us to test boundaries and limits.

Given the stimulation and connectedness that play brings, it is no wonder that children enjoy play with unbridled enthusiasm and endless creativity. When children play, they learn through their own experiences. They bridge connections and find out what works and what does not. At Bing, we seek to develop each child’s imagination and creativity. We use play as a powerful means to encourage children to explore the world, to empower them to be independent as well as to connect with their peers.

Researcher in Profile: Rodolfo Cortes on Reciprocity

By Chia-wa Yeh, Head Teacher and Research Coordinator

An adult accidentally drops a pen on the floor near a child. The adult tries to retrieve it unsuccessfully due to a table blocking the way. Watching this happening, how likely is it that the child will help the adult pick up the pen?

How children learn what behavior is expected of them is at the core of an ongoing investigation by Rodolfo Cortes, a fourth-year graduate student in developmental psychology at Stanford University, who is interested in how children acquire culture.

Cortes was born in Uruapan in Michoacán, Mexico, a city known for its monarch butterfly sanctuary and vast avocado farming. He immigrated to the United States with his parents when he was 9 years old. A keen observer, Cortes noticed minute details in people and his surroundings from a very young age. His acute ability to take in cues, both verbal and non-verbal, was further heightened when his family moved from Mexico to Los Angeles—a highly diverse metropolis ethnically and linguistically—as he had to adapt to a different way of being and learn a new language. Growing up, he loved learning about ancient history and mythology and wanted to be an archeologist, Indiana Jones style. He was also attracted to psychologist Carl Jung’s idea of archetypes and that all of the world’s cultures may show similar mythologies.

Cortes’s interest in how children acquire culture can be attributed to his own experience of moving to the United States.

“It’s important to be able to navigate different cultural contexts. In some cultures, some ways of being are more emphasized, more rewarded than others. Children have to learn how to be attuned to [different situations] and learn how they can thrive in one context and how they can thrive in another context. When children are constantly entering into new groups, they need to be able to figure out how people expect them to behave and they need to have some sense of their goal,” said Cortes.

Cortes studied social sciences at the University of California in Berkeley as an undergraduate and volunteered to conduct research with infants. As an undergraduate, he participated in the Leadership Alliance’s Summer Research-Early Identification...
Reciprocity and generosity
To examine the extent of the effect of reciprocity, children took part in one of the two conditions as in the previous study. The researcher left the room after the first phase and someone else entered the room and invited the children to give one or two stickers to the person they’d just played with. The results showed that children in the reciprocal play condition were significantly more likely to give two stickers, rather than just one.

Why might this occur? The researchers hypothesize that reciprocity builds a “benevolent social contract”—an abstract representation of culture where the proper course of action is to maximize another’s welfare. They tested this in follow-up studies.

Expectations of generosity
Children interacted with two researchers. With one adult, they played in parallel while with another researcher they played reciprocally. Next, another person showed children pictures of the two individuals and asked “who would share this play-dough with you?” The results showed that children expected the reciprocal interaction partner to act generously.

Learning from video
To learn whether children learn these patterns by simply observing others interact, the researchers showed children videos of an adult interacting reciprocally with another adult (adult A) or acting in parallel with a second adult (adult B). The researchers asked the children: “Of these two people (adult A and B), who do you think would share play-dough with you?” In another version of the study, children were asked to donate stickers to one of the two people. The results showed that children are generous toward people who engage reciprocally with other people and expect those people to be generous to them as well.

Trust
In this study, the researchers examined why children may have expected people they had seen engage in reciprocal activities to act prosocially, and why the children acted prosocially toward them as well. They postulated that it’s because children trust those people more. In the study, children watched videos of two people interacting, and then the two people claimed that a novel object was called either, for example, a “toma” or a “dax.” Children were asked whether they thought the object was really a toma or a dax. The results showed that, regardless of the label, children trusted the information provided by the person who interacted reciprocally.

Does the benevolent social contract support the emergence of culture?
Two of the most important aspects of culture involve learning language and learning how to use tools. Cortes pondered: If children are more trusting of people who interact reciprocally, does that mean that they will prefer to learn from these people? The results showed that children chose information from the person who engaged reciprocally.

In another version of the study, children were given the information about a machine and the name for an previously unknown object beforehand and the task was reversed. To whom did children choose to provide useful information? They chose those who interacted reciprocally.

Cortes argues that these studies in a constructed microcosm demonstrate that reciprocity not only induces altruism (i.e., being helpful to others) but also helps children to acquire culture, and it triggers their own transmission of the valuable information that they have learned.

These studies begin to suggest that children are extremely sensitive to social rules—they can understand how they are expected to behave, Cortes said. Some social contexts, such as reciprocal interactions, seem to facilitate learning and teaching. The implications for improving young children’s development are that in order to thrive and help others thrive, children may need to experience reciprocity.

Cortes recently received Stanford’s DARE (Diversifying Academia, Recruiting Excellence) Fellowship for two more years of doctoral training. He greatly enjoys research and hopes to be a professor at a university.

“A little bit of reciprocity goes a long way,” Cortes pointed out that the process that researchers engage in with children to establish rapport validates his research approach. Researchers first interact with children positively in the classroom, for example, reading books, to acquaint themselves with the children, who in turn participate in the researchers’ studies, which are often presented as a game. His hope is that as children develop, the experience of reciprocal interactions will build their self-esteem, which may allow children to develop into parents who maximize their own children’s chances for success in life.
Parent Programs with the Bing Institute: Aiming for Interaction

By Beverley Hartman, Head Teacher and Director of the Bing Institute

This past year the Bing Institute experimented with increasing interaction in our programs for parents. We implemented various structures to encourage and facilitate parents’ active participation in our established programs—seminars, study groups and informal conversations, or “coffee talks”—with promising results.

The first, held in the autumn of 2012, was “Block Party: Learning to Think and Collaborate with Blocks”—an experiential learning opportunity for parents to build community while also working hands-on with materials. Groups of three took on this creative challenge with a collection of hollow blocks, paper, markers, tape and yarn:

Challenge: Use the materials to create something that represents each person in your group.
Rule: All members of your group should feel included and valued.
Expectation: Be willing to share the experience in the larger group.

The process revealed a variety of approaches, from those that plunged into experimenting with the materials and discussing the options along the way to those that sat and planned their project before working with the materials. As groups described their design and outcomes, they revealed a dramatic range of styles. They also gained insights into the experience of accomplishing a task while initiating new relationships. In addition, the reflective process promoted an increased understanding of the children’s experience while participating with materials and each other at school.

As one parent reflected, “This [Block Party] was very valuable for a parent and an individual. It was clear that we all would have been more comfortable building alone, simply because group work is hard. However, working together and seeing the difficulty of group building was eye-opening. I saw how important it is to be sensitive to the work of our children and to understand the time and emotional effort involved in what they do. I felt how hard it must be to gain confidence in our abilities and final products, and also value the process as an equally important aspect.”

The second strategy, explored in the winter of 2013, was a minor variation on an established theme: a coffee talk in the evening instead of the typical daytime hours. This evening session, “What is the Role of Technology in the Lives of Young Children?” resulted in a dynamic discussion. For many parents, navigating the appropriateness of technology is uncharted territory and the rapid growth in technology intended for children makes it hard to keep up-to-date on what is available. Perhaps the discussion generated more questions than answers, but regardless, it increased participants’ awareness of the complexity of the role of technology in young children’s lives. The lively conversation and participation level—32 parents—have us planning to offer more evening coffee talks.

The third new approach was a twist to our study-group format. In the spring of 2013, we formed two separate study groups that met at different times to investigate Stanford psychology professor Carol Dweck’s groundbreaking book Mindset: The New Psychology of Success. Her premise of a “growth mindset” encourages the view that through work and persistence one can improve ability and dispel the idea that intelligence is a fixed state. This powerful concept can shift the way adults view ability and transform the way we help children to think about effort and their own potential for learning. [See Praising Intelligence: Costs to Children’s Self-Esteem and Motivation, The Bing Times 2011, available on http://stanford.io/128LZ7r for more information.]

Both study groups followed our established format during the first meeting, which included video and slide presentations to promote large group discussion as well as small group work to further the experience. But for the second meeting, we asked the parents what they wanted as the focus for the discussion. This co-constructed approach helped ensure that the study groups met the interests of the attending parents.

We appreciate the teachers, parents, researchers and community professionals who contributed to this year’s institute offerings for parents. It was worthwhile to try strategies to increase the level of interaction during these programs. To view the archive of these events and learn about upcoming offerings, please visit http://bingschool.stanford.edu/institute.

“Red legs, brown feet, yellow hands, red hands, orange hands, a big red hand.” By Lula E., 2 years 10 months

A truck. By Shen H., 3 years 1 month
Summer 2012 Bing Institute: The Importance of Basic Materials in Early Childhood
By Karen Robinette, Head Teacher

What are the elements that contribute to a successful group experience? In the case of our 3rd annual Bing Institute’s summer session, held on July 16-20, they were as follows: Take 30 educators from as far away as India and Hong Kong and as close as Foster City and Sunnyvale; provide tasty breakfasts, lunches and snacks; occupy the Tower House, adjacent to Bing Nursery School, for five days; focus on an in-depth study of the basic materials of blocks, clay, paint, sand and water; and sprinkle in several engaging hands-on activities for the participants to enjoy.

The school launched the Bing Institute in 2009 to share Bing’s philosophy, knowledge and experience with early childhood educators and professionals to address important issues in the education of young children. The institute is housed in the beautifully restored brick Tower House next door to Bing. The building, damaged severely in the 1989 earthquake, was meticulously restored by Helen and Peter Bing and John and Gioia Arrillaga and their family in 2009. It enables Bing Nursery School to expand educational programs for adults, such as the Stanford undergraduate courses, coffee talks for the current adult Bing community and evening/weekend programs for local educators. For many years, Bing had been limited in its ability to take an active role in the greater early childhood community, in part due to space constraints.

During our 2012 Bing Institute, educators came from schools whose philosophies and programs varied, but all were interested in how basic materials could be utilized effectively in their respective curricula. The group spent the first day introducing themselves and becoming acclimated to Bing (and in some cases, to the time zone) through an overview of the basic materials and how they are used at the school. Bev Hartman, head teacher and director of the Bing Institute, and Karen Robinette, head teacher, delivered a presentation with video clips that provided an overview of why basic materials are important and how they contribute to children’s development in all of the domains—physical, social, emotional and cognitive. They also emphasized that there is a progression to the use of basic materials. Initially, children can use basic materials right away for sensory input, meaning that they will experience the materials using their senses, primarily of sight, sound and touch. Over time, they use basic materials with intention by learning and managing their characteristics. Eventually, they use basic materials to represent ideas and/or for creative expression.

During the remainder of the week, each of the five basic materials was covered in greater depth. In addition, participants were given the opportunity to engage with these materials alone, in pairs, or in small groups. Sarah Wright, head teacher, helped to design each of these interactive experiences. The educators learned a great deal by investing time in the use of the material and sharing their experience with the group. Many reported being very excited and motivated to use all of these materials on a regular basis in their classrooms after having the opportunity to explore them on their own.

In exploring the topic of sand, Hartman and Robinette encouraged the educators to incorporate sand into their curriculum on a daily basis. Expansive sand areas such as those at Bing are ideal; however, programs with less space can adapt the use of the material by containing it to a child’s hard-sided wading pool, a sand table, or a sand tray. Sand is a versatile material because it can be both a very calming influence and a stimulating one. Sand offers opportunities for children to develop eye-hand coordination, build both fine and gross motor strength and test their theories about the properties of sand through their play. Sand accessories, thoughtfully presented, can offer unlimited opportunities for engagement. Some of the most common sand props include pails, shovels, sand molds, cooking utensils, vehicles and rubber animals.

Nandini Bhattachariya, teacher, and Parul Chandra, head teacher, presented to the group on the topic of clay. They led the educators in a study of the value of this basic material and its benefits to children. Clay is a resistive substance that develops fine muscle control with regular use. It is unique in that it provides children with the opportunity to explore the quality of three dimensions. There are innumerable ways for children to manipulate clay, for example, pounding, patting, squeezing, rolling (on a table or between the palms), tearing or poking. Over time, children’s manipulations become more deliberate and actual techniques are learned such as rolling balls, pinching pots, shaping coils, making slabs, forming textures and patterns, removing or attaching clay, scoring the surface of the clay and/or joining clay together with slip (diluted clay that has a “glue-like” consistency), conditioning clay (adding water to maintain its pliable consistency) and wedging clay (to remove air bubbles). Of all the basic materials, clay is the one that most teachers report that they are least likely to use on a regular basis. Through a combination of presentations, demonstrations and personal “play time” with the clay, the educators went away with a renewed enthusiasm for the regular use of clay as an integral part of their programs.

Jennifer Winters, director, and Todd Erickson, teacher, conducted the presentation on blocks. Bing classrooms are all well equipped with unit blocks, used indoors and designed to fit together perfectly since each of the blocks are either multiples or fractions of the basic unit block (which
Block, clay, paint, sand and water: foundation of Bing Nursery School’s curriculum. These five basic materials, with unlimited possibilities, are open-ended and provide hands-on experiences for young children to explore and express their ideas.

reseembles a rectangular container of butter in size and shape). In addition, the Bing classrooms all have larger scale hollow blocks outdoors under the covered patios. These blocks enable children to build structures big enough that they can fit inside. While blocks have a high initial cost, the investment pays off both in terms of the enduring quality of blocks and what children gain in having regular access to them. Blocks help children discover the existence of standard units for measurement; provide them with an increased awareness of space, height, length and volume; and give opportunities to explore concepts of balance, stability, symmetry, equilibrium, directionality and gravity. Children develop block skills through a defined progression that includes carrying, stacking (vertical towers and horizontal rows), bridging, enclosures, patterns and symmetry, representation (named structures) and actual structures (a depiction of the Golden Gate Bridge, for example). During repeated opportunities to build with blocks, children go through this progression and gain the skills necessary to develop the ability to represent their ideas.

Seyon V Erdtzabella, former Bing teacher, and Nancy V Erdtzabella, teacher, engaged participants through numerous water activity set-ups that were designed to encourage the creative use of water in the classroom environment. Some of these set-ups included PVC pipe configurations; a replication of a pond using stones, leaves, and plastic animals such as frogs, ducks and fish; pouring with various containers; and baby doll washing with small tubs of water, soap and wash cloths. These diverse and open-ended activities helped participants consider the use of water as a basic curriculum material. Children engage in experimentation, measurement, creativity and collaboration when afforded frequent, consistent and reliable access to water. They begin to discover the properties of this basic material and form hypotheses about its usefulness or limitations by testing their ideas. Water play can take place on a large scale, like the kind that occurs when water is used in an expansive place such as the sand areas at Bing. It can also be adapted for use in more contained spaces through the use of a galvanized washtub, a water table, a sink or a container such as a jug. Water play accessories are plentiful and varied and may include boats, buckets, clear tubing, colanders, funnels, ladles, measuring cups, pitchers, plastic rain gutters, sea animals, sprinkling cans, water pumps and water wheels.

Emma Ludwick and Jasmine Dobbs-Marsh, both teachers, led the final presentation on paint. They focused primarily on easel painting, although other painting experiences such as finger painting, large-scale painting and watercolors are also valuable. Painting is a process that follows a predictable sequence. Children first encounter paint in an exploratory manner as they engage their senses and familiarize themselves with the properties. Then, they begin to experiment by learning to manipulate a brush, mix colors and make marks on the canvas. Over time, their work becomes increasingly intentional and complex as they experiment with lines, shapes, symmetry, patterns and a greater use of color. Eventually, design and representation works emerge to form identifiable or “intentionally abstract” works. Ludwick and Dobbs-Marsh stressed that each of the stages in the painting process (from the exploratory scribbling to representational depiction) reflects both effort and growth and is a valuable and meaningful event.

In addition to the focus on the five basic materials, the educators were delighted to have two opportunities to observe in the Bing classrooms. Prior to their observations, Hartman and Robinette outlined a technique for conducting classroom observations. The primary steps are to first select a 3- to 5-minute event to observe, then form a general outline of what took place in the event, fill in with more specific detail about the event as it unfolded, and finally, capture the quality of the behavior or how a situation was carried out. For example, if a child was pouring water from one container to another, did she do so in a careful, deliberate manner watching it trickle in, or did she pour it quickly with much of it missing the intended target? The participants had the opportunity to practice this observation technique by first analyzing video and later through the event they selected to observe in the classroom. Their initial observation focused on the children’s use of one of the five basic materials. The second observation honed in on the teacher’s role in supporting children in their use of these materials. Many came away wishing they had more time for observation, as they found it valuable for determining a child’s insights while exploring and experimenting with these materials.

Our annual Bing Institute is an event that requires a commitment from our entire Bing Nursery School staff. It is through everyone’s support and effort that we are able to open our doors to other educators from near and far. We are pleased that we can reach out to others in the greater early childhood education community.
Exploring Tools in the Twos

By Mary Munday, Head Teacher

“Where is the hammer? I need a hammer. I need to fix the house!” said Chase as he entered the classroom, quickly looking for the tools. A teacher showed him the toolboxes she had placed on the deck nearby. He immediately found the hammer and began to work on the outside of the playhouse. As other children heard the sound, they approached and looked for a tool to use as well. Soon a group of children were hammering, sawing, drilling and fixing the house together.

“I’m cutting. I’m fixing.” —Colin

Hammers make a lot of noise! She’s fixing the school. I’m fixing the house. —Chase

“I’m fixing the floor.” —Emerson

I’m fixing, too. —Colin

We’re working too hard! I’m fixing the roof. We’re fixing the inside. We’re fixing the walls. It’s broken still. —Chase

Children in the Monday/Wednesday/Friday morning Twos program have been interested in tools this year. Sparked by the introduction of wooden toy hammers, many of the children used golf tees as nails and pounded them into large burlap-covered foam rectangles. The materials for this activity were placed on the outside patio platform. Soon they wanted to try the hammers in other areas of the yard, including the playhouse. As the interest increased, teachers provided toolboxes that included a variety of wooden child-sized tools, and introduced new vocabulary such as drill, square, screwdriver and wrench. Children used the tools throughout the environment as they pretended to fix the house, the slide structure, the rabbit cage and even the posts supporting the patio roof.

Other materials related to tools were also available in the classroom, including puzzles and books. Teachers sang songs and read stories on the topic of tools at music and story time. Children carried tool-shaped puzzle pieces to the block area and used them on block structures and on the dollhouse inside the classroom, making drill sounds as they worked with the tools. Books were revisited daily as a reference to the many types of tools.

“Look that’s a square and that’s a wrench! What’s that? That’s a drill,” Jayden said.

Teachers talked to the children about Gene Aiken and his role at Bing as our carpenter/facilities coordinator. We discussed how Gene constructs and repairs the play structures at Bing and how he prepares the wood we use for projects in the classroom. Children explored the various shapes of wood that Gene cuts for us and they used these pieces for building, gluing and narrating stories. Next, sand blocks were introduced and children experimented with how the sandpaper made the wood smooth.

As the interest in tools continued, teachers invited Gene to demonstrate the use of different tools. He brought in his large toolbox and showed the children a hammer, a saw and even a power drill. He also used sandpaper and a measuring tape. He compared the similarities and differences of his tools to those that the children played with in the classroom. Gene described each tool and demonstrated its function, constructing a birdhouse for the children at the end of the visit.

Following the demonstration, Gene supervised the children while they tried his hammer. He helped the children with their hand placement while they hammered very large nails into a large block of wood. Some children preferred to observe while others were eager to try. A few children were interested in using Gene’s measuring tape. Vicky Kalumbi, a Stanford undergraduate student taking Psychology 147: Development in Early Childhood, held the tape as they measured many things in the environment including the teachers. “Twenty-nine inches! Teacher Mary is 29 inches!” said Ryder. While children’s concept of numerals is rudimentary, their beginning interest in number values was evident as they searched for other teachers and items to measure.

Following Gene’s visit, we took the class to see his workshop. Children saw how Gene organizes all his tools and cuts wood for us. Then we showed the children where he places the wood for us to pick up. Next Gene introduced a few more tools, including a screwdriver and glue, and constructed another birdhouse, which the children brought back to the classroom for their play.

The use of tools to construct a house became a focal point and children wanted to build their own houses. Teachers provided glue along with wood pieces of all sizes. Soon they had created an entire neighborhood from the wood pieces, which they continued to play with over the following weeks. The two houses that the children built with Gene remain in the classroom and are used daily with multiple scripts created by the children.

What had started as free play with hammers led to a deep interest in tools and discoveries about how and why tools work. But the children learned about much more than tools. They learned new vocabulary — such as rough, bumpy and smooth. They worked together and took turns with the tools. And they felt empowered by using a real adult tool, an experience they’ll continue to build upon as they advance to the nursery program.
Children enter a new and expanded world when they begin school. Two-year-olds can be intimidated by the big step they are taking, but creative arts often provide the platform for entry that they need to establish comfort. With freedom of expression and ability to control the creative medium comes confidence. We emphasize creative art in the Twos class because it welcomes young children with its accessibility and broad possibilities.

Easel painting may be the first of the visual arts that the 2-year-old approaches. Standing at their height is an easel holding a large sheet of sturdy white paper and one brush in one color of paint. The brush is long and wide, which offers the freedom of reach and the satisfaction of a broad stroke of paint.

Much of the child’s first painting is kinesthetic in nature. Children explore the medium through picking up paintbrushes and moving their hands and arms. By observing the painting emerging on the easel, children realize a visual feedback that is the result of their motor activity. Each creation is unique to each child but we often find they repeat a pattern that their body movements are creating. Soon they pay more attention to the visual stimulation. We add more colors of paint to the easel and children begin to mix colors, use two hands, try out purposeful patterns and paint on the entire piece of paper. For example, Milan always loved to dab and stab the brush and one day started calling the result on the paper “rain, it’s raining!” as he added more and more “drops” to the page.

This deliberate form of exploration doesn’t need a lot of support from teachers, but a little is often helpful. For example, the teacher can provide another color or a smaller brush in response to the needs of the child. Teachers can also offer encouragement. Some children like to paint for someone else as Elise did for months. Teachers propped up her “Mommy picture” [a photo of her and her mother] on a chair in front of her which helped Elise feel connected with her mother as she created a painting for her.

The first paintings are primarily abstract. Teachers and parents can promote the creative process by remarking on the qualities that they can see and the effort devoted to the work such as, “Your painting has a lot of lines going up and down,” or “You have been working for a long time—the white paper is almost covered up.” Promoting creativity can also be a focus by pointing out unique qualities, encouraging the child to step back and look at the painting and asking questions like “Do you need another color? Can I write anything about your painting?”

Shen was always enthusiastic about painting when red paint was available. His work progressed from the beginning when he first painted in gestures with just red to then painting the whole paper red to eventually creating representational work. When teacher Karen Yamamoto read The Little Blue Truck at story time, Shen’s response was to paint a truck. Of course, it included some red in the composition. His progression in painting is a typical model for the process of a 2-year-old.

Playdough is the three-dimensional material we use for exploration and refinement of the tactile sense. Two-year-olds love to poke, squeeze, roll and pile the pliable medium. They are soothed by its soft, malleable nature. We use this material not only because of its developmental and therapeutic values but also its creative potential. It quickly becomes a vehicle for make-believe. Used in conjunction with props it can be food, used with hand tools it can be a construction device and on its own it can be a sculpture. As a tool for expression and shared experience, it is priceless. Often the scene of children’s first experiences with sharing, the playdough table becomes a forum for artistic exchange.

A child with an original idea can begin a creative wave. Maya rolled out a large disk of playdough and poked two holes in it, saying, “Look, a face, Teacher Kittil!” She rolled a small coil, placed it carefully on the disk and said, “This is the mouth.” “And hair!” she added as she attached lots of little coils of dough poking from the top. This was the inspiration for many faces made by her friends that day.

For children whose strengths lie in the auditory realm, music time is often the creative outlet of choice. The majority of traditional children’s music offers many opportunities for creativity and expression. We start the year with familiar songs that comfort and allow participation. The Wheels on the Bus encourages involvement and fosters many possibilities of sound and movement. These first musical experiences are the beginning of singing and dancing together. We later expand to rhyming songs, animal songs and songs that build upon themselves such as The Green Grass Grew All Around.

Teachers can be particularly helpful to a child who is hesitant in a large group by highlighting their ability. Teacher Melissa Guevara was supportive of Xanti when his interest in music was evident. She encouraged him by choosing songs she had heard him sing in Spanish. He then regularly came to music time and provided a great example in the realm of dance with his graceful and rhythmic movement. As he spoke more English in school, he also sang more. He now sings improvised songs while working or playing and often accompanies other children’s play with an appropriate song. He sang The Wheels on the Bus as Lula and Tatiana made a traveling scenario for the characters in The Bear Hunt. His entry into play is now often through singing.

Children absorb the world through their senses. By making an art curriculum available and easy to access, even the youngest child can achieve a creative and satisfying outcome and build skills they will use as lifelong learners.
Creative Thinking with Design Materials
By Adrienne Lomangino, Head Teacher

It’s 12:44 p.m. The afternoon session in the East PM class starts in one minute. Taking a last scan around the classroom, I think, “We’ll see what happens today.” This moment of anticipatory uncertainty is not due to lack of planning: The teachers have set out materials indoors and outdoors for the children to use. However, rather than providing materials with a prescribed purpose and expected product, many are provided for open-ended play, for uses as endless as children’s imaginations.

This year the children in East PM have particularly enjoyed using recyclables and scraps, which the Bing staff calls design materials. As the children use tape, scissors, glue and staples to piece together their projects made of paper, bottle caps, cloth and sundry other items, they make connections between the materials and objects in their imagination or previous experience. A piece of cardboard becomes an airplane wing, red and orange feathers are rocket flames. During the process of construction, children make discoveries about both the materials and their own ideas. After eagerly making a kite out of a small box, for example, Chloe (3 years 11 months) discovered that it fell to the ground, too heavy to fly. After a second a kite — this time made with tissue paper, ribbons, packing peanuts and small pieces of fabric — also fell to the ground, Chloe objected, “I made it with light things and it didn’t work.” She and a playmate Margaret then took their creations to the swings. She exclaimed to teacher Mary Munday, “Margaret and me, we made a plan to fly our kites on the swings... Yeah! Look! My idea is working!” The children’s efforts to see the possibilities in the materials, test them out and clarify their project ideas make each day interesting. Then there are moments when the children’s endeavors make the teachers marvel. Here is one child’s description of her creation process:

“At first I said, ‘rainbow bird.’ And then I took some materials and I put some things on. And then I took that book (Brown Bear, Brown Bear) and then I saw the bird page and I took some materials again. And then I put everything I wanted to put. And then I made the tail. I took something with cardboard and velvet. And I took some paper and ribbon and I took some tape and stuck it on the cardboard with velvet. And then I made my bird. It can fly. Like this (holds up). Maybe I can make a kite with it.” (Amaya, 4 years 7 months)

Amaya’s project is one of multiple examples of how children use these materials to construct what is in their imagination. No one has told them what to make. They are envisioning a possibility in their minds. Amaya was thinking about a fantastical type of bird, a rainbow bird. Other children’s imaginings include cars, race-tracks, houses, kites, family members, robots, books with flaps and televisions. Examining the available options, they make connections between their imaginings and the materials. They critically consider which materials to use.

Children do not initially create projects like Amaya’s when they begin using the design materials. Each day the creations with design materials vary from simple (e.g., a strip of paper with snips cut into it, a string taped to paper), to complex (e.g., rockets, airplanes, a jewelry box). Before embarking on complicated projects, children first need repeated experiences of exploring what these materials can and cannot do.

Once they have learned the capacities and constraints of the materials (e.g., masking tape is stronger than Scotch tape, but more difficult to cut; paper is more flexible than cardboard, but less stiff; staples will connect items securely, but are difficult to attach to narrow or hard materials), the children use them in fascinating ways to give form to their imaginings. While in many cases the projects get put into their cubbies when completed, in some cases their creations become part of their play or even the focus of their activity.

At the design table, teacher Mary comments to Ethan that he’s building something similar to what he built last time. Ethan responds, “Yeah, because I lost my other boat. If I find it, then I have two. If you see it, say, ‘There’s Ethan’s boat!’ and I’ll come get it.” He tapes craft sticks together, putting on tape vertically and horizontally. He forms a base of sticks with walls on the sides, “because the water can’t get in.” He explains, “I’m making a boat. I’ve decided that my boat will float and not sink. Last time, I put my boat and put it in the bucket and it did not sink. I’m going to try this one in the sand area where there is a hose.” He walks his boat out to the sand and places it in the water. Gazing at it, he observes, “It just tipped. It just sunk a little. It moved.” He bends down to blow on the sail. “Look, it moved!... It tipped a little. It was going in the sea.” (Ethan, 4 years 10 months)

The way Ethan and Amaya engage with these materials illustrates creative thinking, which has been defined by the U.K. National Advisory Committee on Creative and Cultural Education as “imaginative activity fashioned so as to produce outcomes that are both original and of value.” While creative thinking begins with imagination, it does not end there. These imaginings need to be given form. Thus, creative thinking not only involves
generating ideas, but also planning and examination of how to bring them to realization. Each day the children construct things out of their own imaginations that no one has made before. These constructions have value beyond their instrumental function in promoting children’s motor skills, focus and persistence. They have importance due to the personal satisfaction of seeing one’s efforts lead to a tangible artifact. The creations include props that elaborate their play, adding detail and complexity to the scenario (such as making “medals” for participants in impromptu running races). Their constructions also have value as toys for use (such as Ethan’s boat).

Through this process of creating something from their imagination, children often extend their own imaginative activity. For example, while using the boat he made, Ethan started imagining it sailing out to sea. And while describing her bird, Amaya imagined the possibility of transforming it into a kite. Children’s creative thinking thereby cultivates itself.

These instances of focused thinking in action have provided the teachers in East PM with numerous moments of appreciation and awe. I look forward to the surprises each day brings, and hope use of these materials will be just a starting place for further developing the children’s creative thinking.

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**Community Through the Eyes of West AM Children**

**By Peckie Peters, Head Teacher**

Sloan watched carefully as Bo gently removed the pea seedling from its plastic container. Bo held the tiny plant in one hand as she used two fingers to make a small hole in the flowerbed where Sloan had recently hunted for worms in the rich, dark soil. Bo placed the plant and began to cover it with dirt. Suddenly, she stopped, her head tilted to one side. She looked at Sloan and announced: “Jesús! It’s Jesús!” The two exchanged a smile and Sloan shrieked: “Let’s go see!” The two girls ran across the grass to the bridge where there is a clear view of the garbage dumpster just as Jesús, our trash collector, pulled his shiny garbage truck into the driveway. He waved to the group of children, now about 20 in number, peering through holes in the fence and standing on top of the hill next to the bridge. Children watched with excitement as he lifted the massive dumpster up, dropping its contents into the truck. He tooted the horn, waved and backed out of the driveway, all with the rapt attention of the children.

Jesús is a member of our community in West AM. He earned this distinction by accepting an invitation to bring his truck to share with the children, allowing them to climb inside, pretend to drive and even try out the horn! His friendship expanded our community this year and with it, the children’s understanding of what it means to be part of a bigger community.

The National Association for the Education of Young Children states that it’s important for educators to create a “caring community of learners” in the classroom. This community arises when relationships are encouraged and supported between adults and children, among children, among teachers and between teachers and families. Every fall teachers commit to building this community because it’s the foundation for all other learning. Children need to first feel secure and supported in the environment, knowing that they are surrounded by people whom they can trust. This is a process that can take time because children and families need to experience school in order to learn that it is a safe place. Over time they understand that school can be as safe as home because school becomes familiar, the school routine becomes predictable and they know that their feelings and interests will be valued by the group.

In early September we asked parents to bring pictures of themselves and their children to school so children could see their families represented in the classroom. Teachers modeled this by sharing aspects of their life outside of school and displaying a collage of pictures of their own families. Children helped to create their own pages of photos, which were then displayed to the group and ultimately gathered in our class binder. Children visited and revisited pictures of themselves and each other and learned about each child’s experiences. “There’s me in Santa Cruz with my family.” “There’s Lucy’s brother, Banks. I know him.” “I have a brother too. And a sister.” We also invited families to share something important for their family: an art project, a book, a song or a favorite recipe. David’s family taught us the Happy Birthday song in Korean, Rosalia’s grandmother joined us to make delicious Croatian turnovers with spinach and cheese, Anna’s dad brought supplies for making paper snowflakes and helped those who were learning to use scissors and Addie’s dad sang us a song he composed that he sings regularly to Addie. We
spent autumn quarter learning about each other and seeing that we had shared interests and commonalities that make us into a community.

As teachers prepared for winter quarter we wanted to expand children’s perceptions of what it means to be in a community. We thought we might explore the broader Bing environment or even the world outside of school. We weren’t clear about how we would embark, but on the first day of winter quarter we got our answer. In the early part of the day, emergency personnel responded to a smoke alarm in the kitchen. Firefighters and police arrived to investigate and reassured us that all was fine. Children watched with fascination and quickly began to mimic their movements: jumping into the train, which they now called a fire truck, and running up the side of the hill to put out the fire. The teachers decided to build on this interest by focusing the children’s explorations on people who help us in the community, beginning with firefighters.

We began by adding materials to our environment that could be used in play scenarios relating to firefighters: tubing which could represent hoses or other equipment, books about firefighting, coats, hats and ladders. Children’s play with these new items was rich and focused and also ment, books about firefighting, coats, hats and ladders. Children’s play with these new items was rich and focused and also incorporated regularly available materials including clip boards, phones, doctor equipment and computer keyboards. Groups of four or five donned a variety of paraphernalia and raced around the yard asking other children if they had spotted any fires. When Jack joined a group in the midst of a “job,” he was concerned he didn’t have a uniform. “You don’t need it,” reassured Oliver. “Just help us put out the fire like this,” he said, reaching his hands straight out with index fingers extended. Jack quickly joined the group in action.

Children seemed interested in the firefighting tools so teachers decided to help them explore our broader environment, locating fire hydrants, hoses and fire alarms in our vicinity. Back in the classroom children were excited to share their adventure. The play expanded to include paramedics, as firefighters gently cradled babies they had rescued from fires. Children then created doctor’s offices where they could treat illnesses that couldn’t be addressed by firefighters. The teachers’ roles were largely observational: watching to see when a new role or material could be introduced. As winter quarter ended, children continued to play firefighters and watch the garbage collector. Understanding that they are part of the community didn’t seem to be their biggest priority, yet as we watched their interactions we discovered that their identity as part of a group was strong and that we had met our original goal. It seemed clear that when children believe that they are part of a community, they have an interest in making it function well. The “firefighters” were committed to this process, determined to keep the classroom safe for all children and babies. Children know that garbage is composed of items that can’t go into recycling or compost, but that if we take our leftover fruit and peels to our compost each day it will break down into really good soil that is good for the garden and will attract really good worms.

We ended the quarter by physically building our own community, a 3-D configuration of glue, small wooden pieces, corks, paint and other found materials. To start this project, we presented children with a piece of plywood and invited them to create their own community. The result included a hotel, two swimming pools, a gas station, a grocery store, statues, a train, multiple towers and lots of other buildings. As we watched children building cooperatively, sharing ideas and space as they each contributed to the project, it was clear that they understood the idea of community. A community is made up of places, but it is the people working together that really make it work. They learned this from each other, from community workers like Jesús the trash collector and quite possibly from teachers and parents, too.

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**Bing Children's Fair 2013**

Approximately 600 families enjoyed this year’s Bing Children's Fair on Sunday, May 19 at Bing Nursery School. On a beautiful, sunny day, attendees reveled in entertainment including the Mariachi Cardenal de Stanford and the ever-popular and incomparable Leland Stanford Junior University Marching Band.

Children of all ages were excited to create their own easel painting, dig up a “dinosaur” at the scavenger hunt, or design their own cookie with icing. Cupcakes, brownies and sweets of all kinds were a hit, and nobody could pass up the delicious food.

Before the fair, approximately 200 alumni families joined the Bing staff at the alumni breakfast. It was wonderful to see and talk to so many alumni children, as well as their parents, some of whom are Bing alumni themselves.

We would like to thank our Bing Fair co-chairs, Krista Fazio, Andy Young and Cindy Young, for organizing a beautiful fair. Over 300 parent volunteers staffed the activity and food booths this year and many others prepared goods for the bake sale and the international/American food booth. Thank you also to the many community donors who contributed to the fair. Proceeds benefit the Bing Nursery School Scholarship Fund.

— Sandra Gedeon, Business Manager

Co-Chairs: Krista Fazio, Andy Young, Cindy Young • Activity Chairs: Advanced Ticket Sales: Kelly Griggs • Ticket Sales at Alumni Breakfast: Kristen Lamb Dubiel • Bake Sale: Jeanne Tsai, Marielena Kaplan, Cara Barone • Bean Bag Toss: Euni Valentine • Cake Walk: Cindy Young • Challenge Course: Stacia Wells • Cookie Painting: Kathleen Chepko • Donations: Tara Carranza • Duck Pond: Joanna Lin • Easel Painting: Erin Olmstead • Face Painting: Petia Kremen • Fishing Hole: Esther Levy • Frozen Fruit Bars: Sharon Shen • Handprints: Nicole Moore • International/American Foods: Margarita Cohen, Adriana Flores • International/American Foods Kitchen: Dorothy An • Pizza Booth: Payal Chahda • Pocket Person: Rachelle Doorley • Sand Castles: Estell Lam • Scavenger Hunt: Christian Dubiel • Set-Up: Will Wu • Spirit Shop: Yeuen Kim • Ticket Sales: Dawn Bercow • Volunteer Table: Margaret Hayes • Waterworks: Ayelet Lorberbaum • Wood Gluing: Anna Tamis
When presented with a sample of writing that is clearly scribble and asked by a young child to read it, what is an appropriate response?

According to Schickedanz and Collins, in their book *So Much More than the ABCs: The Early Phases of Reading and Writing* (2012), “Children who ask an adult to read their scribbles show awareness that marks convey meaning.” At this intentional representational stage, a child may designate scribbles as writing. As children assign meaning to their own symbols, they are beginning to grasp a new aspect of language: that of written symbols to communicate information. They are becoming aware that writing and drawing are different, sometimes pointing to scribbled “words” while pretending to read. They are beginning to understand that print carries a message.

The examples of writing behaviors we see in the nursery school classroom vary tremendously. As the young child enters the beginning stages of writing, we know the child’s thoughts only by listening to them or by watching the context in which the child makes the marks. It is through careful observation and recording of children’s writing that we begin to see what children really understand about print.

In the following three examples, children attempt to convey their meaning through a combination of marks. We see no real difference in the marks intended as drawing and those intended to say something. However, in context, the experience and understanding a child has about writing becomes clear.

In the first piece of work, 1) *Letter to Mom*, the child verbalizes his thoughts:

> “I have to write this quickly. Mommy’s going to work.”

The child’s comments relate clearly to the intensity of the scribble. He seemingly wants to get the note written quickly so he can give it to his mom before she heads out to work.

The second piece, 2) *The List*, clearly shows beginning awareness of print begins (on the left side of the paper) and how print is positioned in list format (top to bottom orientation).

> 2) The list: sugar, flour, eggs, cake.
> By Cate G. 3 years 6 months

The third piece of early writing, 3) *Map of How to Get to Bing School from My House*, represents pathways on a map. “I live near a crooked road so I made it really crooked” explains a child, as he confidently waves the work in front of a familiar teacher, then runs off into the yard, referring to his map for direction.

> 3) Map of how to get to Bing from my house.
> “I live near a crooked road so I made it really crooked.” By Drew M., 3 years 11 months

The above examples are early writing attempts by 3-year-olds. Each one highlights a different way young children can express their meaning through making marks. What is important in all three examples is the child’s attempt to convey meaning. Schickedanz and Collins point out that “It’s important to keep meaning afloat in these early years, and not focus narrowly on requiring children to represent ideas only in writing.”

Young children, after all, have numerous ways of conveying meaning before they can use print. Genishi and Dyson (2009) suggest that engaging in pretend play, drawing, and talking are all well-established ways of conveying meaning. For example, the 3-year-old who drew the map of Bing school did not use conventional writing to convey his meaning, but was clearly able to articulate his ideas of his journey to Bing. He also used the map in his pretend play as he went on an adventure in the yard, encouraging his friend to follow and “read” his map. This map held an obvious importance for this 3-year-old. He was intrinsically motivated to produce it since it fit into the context of his own ideas. If we, as early childhood teachers, had asked this child to draw and label a map in the hope of teaching him how to write, the meaning may have been lost for this child.

As early childhood teachers, we can encourage early literacy. First, we can provide an environment that encourages children to explore, test and express their ideas. We can be there to ask questions about their ideas, prompting them to provide more information. We can record their ideas and thoughts by saying “tell me about your work.” We can help them explore ways to convey their meaning, and we can give them plenty of time to practice. As Schickedanz and Collins agree: “Far better for the child in the long run to talk more about what she means, and worry less about writing it down... While there is a time and a place for expecting independence too soon in some realms stifles what children are willing to think and say, because representing it by themselves is overwhelming.”

The challenge for teachers in the nursery school classroom, write Genishi and Dyson, is to help children develop skills in the written forms of communication, while also supporting and nurturing skills in the more well-established modes of conveying meaning: drawing, pretend play, gesturing and talking. Accomplishing this teaching goal, according to Schickedanz and Collins, requires “giving children freedom to use multiple means to represent and convey meaning (e.g., drawing, writing, talking), and accepting writing as a somewhat minor player in the communication of meaning, for a while.” Accepting writing as a minor player may seem limiting to us adults. After all, isn’t school supposed to teach writing? But, preschools or nursery schools rooted in developmentally appropriate practices acknowledge and value the intentional representational stage, when scribbles are intended as writing. At this stage, young children explore using their own symbols to convey their meaning and eventually to develop a new aspect of language: that of written symbols.
Mary had a little lamb, little lamb,
Mary had a little lamb whose fleece was white as snow.
And everywhere that Mary went the lamb was sure to go.

Just like in this familiar nursery rhyme where the lamb follows Mary to school one day and delights the children there, a little lamb did indeed visit Center AM on one occasion, and its fleece, or rather wool and yarn, was the subject of an in-depth exploration.

Our goal at Bing is to instill children with the confidence and curiosity of a Thomas Edison (whose interest in exploring and discovering the mysteries of the natural world led to a myriad of technological inventions) while encouraging them to draw upon their own personalities and sensitivities as they learn about the natural world, their environment. On a side note, it is interesting to see that Thomas Edison chose this particular nursery rhyme about the little lamb as the first thing he recorded on his newly invented phonograph in 1877.

The children’s interest in wool and yarn took off this winter after the teachers began collecting wool and yarn because of their warmth. Beautiful colors and a range of textures were presented at the discovery table along with combs, woolen hats, mittens, gloves, scarves, blankets, knitting needles, books on sheep, plastic sheep and pretend grass. Drawn to the very tactile nature of the materials, the children were delighted by them. Teachers observed incredibly diverse responses. Some children brushed the wool with carding combs. Some wound and unwound balls of yarn, rolled balls of yarn and stretched yarn from one end of the room to another. One child picked up a ball of yarn and said, “Kitty.” Overall, they delighted in the materials. For some, wool was a novel material. Others who were more familiar with it shared their knowledge. For example:

It works together by smooshing it together. —Callum
It has teensy weensy bits of string all together, all twisted. —Jane Esther

Jane Esther notices she is wearing a sweater made of wool because “it is made of little strings.”

It’s a string and we can sew with it. You can poke it with needles and stuff. —Ben

It is soft and scratchy. —Hank

The excitement at the discovery table spread throughout the classroom. Children integrated the wool and yarn into their play with the classroom’s traditional basic materials, which include blocks, clay, paint, sand and water. As children experimented with wool and yarn, teachers saw their excitement grow.

For example, when Andrew studied the wool yarn outside on the patio, he used a magnifier to look closely and pulled the yarn apart to examine it. Andrew exclaimed, “The inside is just like the outside. It is furry and fuzzy even when it is small and pulled apart.” Ben excitedly directed the group to pull the string around the trees to tighten the yarn. He said, “I’m going to use this whole stack of yarn. This is how.” Addison added, “I’m going to wrap it around the climbing structure.” Myles, who had been attempting to tie a knot with the yarn, exclaimed, “I’m making a trap.” Hank wanted it to go around all the trees, and he said, “So no one can go into the grove like last time.” They all agreed to use the yarn to trap people and animals. Children are naturally motivated to play freely and imaginatively like this and it’s crucial for their development. It strengthens thinking and problem-solving skills and is an organic way for children to develop social skills. Our wool project promoted dialogue as children investigated and experimented with the materials, shared ideas and worked together. It also provided opportunities for collaboration and for considering the perspectives of others alongside their own.

**A Farmer Brings His Lamb to Visit**

Children were absolutely thrilled to learn that teacher Kate Dwelley’s friend Sean Mahoney, a farmer, was bringing a 2-month-old lamb to the classroom. They prepared by compiling a list of questions for Sean and setting up the yard for the lamb. The classroom was buzzing with excitement the morning of the visit. A group of children went to the parking lot to greet Sean and his lamb and were wide-eyed with amazement when they arrived. The lamb spent the morning in our yard surrounded by the children, who had many comments and questions to share with Sean and each other. For example, they compared the wool on the discovery table to the wool on the lamb: “The wool is not soft,” said James as he petted the lamb. Children took turns going into the pen to feed the lamb and discovered it preferred hay to cabbage. They were awe-struck when the lamb escaped from the pen and surprised them in the classroom at snack time.

Sean spoke about farm life and how he tends the lamb and he patiently answered questions. Zoya wanted to know if we could comb the lamb’s wool. She was also interested in its gender. Layla was curious about how the farmer knew when it was time to shear the wool. Katia asked, “How does it grow wool?” Anja inquired, “What are baby sheep called?”

Sean has offered to bring in wool sheared from the lamb and now we are planning on washing, carding and dying the wool as described in the books we have been reading at story time. Through these books, the children have learned about the many stages that the wool undergoes before it can be used to knit and weave.
Spinning Wool
Eron, a friend of one of the children’s parents, brought in a wooden spinning wheel to demonstrate how wool is made into yarn. First, she let the children feel a variety of wool pieces to compare the textures and to guess which animal they came from. Then she explained the process of turning wool into yarn. She also explained all the parts of the spinning wheel and she invited children to feed their favorite type of wool into the wheel while she pedaled. It was fascinating to watch the fuzzy wool turn into skinny yarn. Each child got a piece of yarn from different varieties of sheep, alpaca, llama and rabbit to compare their textures. She pointed out the tiny hooks on the fiber that hook on to each other, keeping the fiber together to make yarn. Children watched carefully as she moved her fingers and pumped the wheel at the same time. Addison fed wool into the wheel and noticed, “Everything on the other side is puffy and then it becomes thin.” Eron also demonstrated felting—rubbing the wool with or without a little water in the palms and fingers. Children began making long braids of felted wool as they vigorously rolled the wool in their palms. By supplementing the classroom supplies with a real sheep and a spinning wheel, teachers enhanced the children’s creative opportunities and enabled them to have a hands-on experience and discover the relationship between sheep and our woolen clothing.

Using Wool for Creative Expression
A variety of wool and balls of yarn were available to the children every day in the classroom. We observed the children using these in creative and novel ways. Children selected from the wool and yarn and Jane Ester created a self-portrait with these materials exclaiming, “I first put the white. And then I put the other colors. And then I taped them after I flattened them. It’s me; it’s Jane Ester!” We painted, sewed and wove with yarn, both vertically (on the temporary plastic fence in our yard) and horizontally (on the patio table). Children sewed their own pre-cut mittens with holes along the edges with yarn inspired by The Mitten book, and used these weaving projects in their dramatic play scenarios. Children drew and painted sheep and narrated stories about their depictions. A parent demonstrated knitting both with needles and fingers. Amalia confidently announced that knitting was when you stick two things to make a scarf!

Children watched the wool change color during the dyeing project. Natural dyes like turmeric, red onion skins, blueberries and tea bags were used to color our felted wool. Later we used these pieces to make collages.

Discussions and Inquiries
Books related to wool and sheep were read at story time and snack time. These books led to group discussions, the sharing of ideas and the asking of questions. Some of our favorites were Farmer Brown Shears his Sheep, The Mitten, Woolbar and Extra Yarn.

This kind of curriculum, where children can engage fully with materials and experiment with them over time, supports their cognitive, emotional, social, physical and language development. These learning opportunities are valuable precursors to the mental processes that later enable reading, writing and mathematical thought. The experience of creating imaginary scenarios fosters oral language and the ability to talk about their play further contributes to early literacy. In addition, children learned wool vocabulary through books and conversations with adult experts and peers. Their play was enlivened with words like shear, card, felt, dye, weave, knit, spin, sew, fiber, ewe and flock.

Children asked questions and shared their impressions with others as they used these wool-related materials. These conversations encourage children to inquire and contemplate. A group of children debated the difference between a lamb and a sheep. While Audrey thought lambs were black and sheep were white, Elsa contradicted her when she said, “They are the same.” Myles, who was also thinking about it, elaborated, “They eat grass, sheep grass, filthy grass. The lamb is different. His face is different and the sheep is white. The lamb is white right here and black. This is the sheep, this is the lamb [pointing to the plastic animals on the table].” Moving her sheep into the barn she had built with unit blocks, Ameera quietly commented, “The sheep has horns and the lamb has no horns. They belong to the same family. One is the boy, the lamb and the sheep is a girl.”

Lucy was trying to understand why sheep get sheared. “Why do we take their [sheep] coat away?” Layla straightforwardly explained, “They need to grow more. They will be too hot in summer. If we don’t shave them the sheep will be too hot.” Nola validated Layla’s theory by saying, “Yes, they do it [shear] in the beginning of summer.” All such encounters cultivate a propensity for the love of learning and self-discovery.

As a culmination to our project, we invited the families to visit Hidden Villa, a non-profit organic farm located in Los Altos Hills, Calif., that offers community programs, educational courses for students and more, to watch the shearing of the sheep. At the farm, children can see the sheep get their annual hair cut, cheer hardworking dogs as they round up the sheep and learn how wool goes from shaggy sheep to beautiful sweaters. This was a wonderful opportunity for children to reflect on what they have learned through the wool project.

Photo not available online.

Children examine wool in clothing and yarn in the classroom.
Experiencing and creating with recycled or “found” materials is a big part of everyday life at Bing Nursery School, much to the benefit of both the children and the environment.

Recycled, or “found,” materials represent an abundant, sustainable and affordable resource for young children’s creative self-expression. They are also a great resource for design thinking, a methodology for problem solving that focuses on creative thinking to generate insights and solutions. Each Bing classroom is equipped with a design table where children have access to an array of recycled materials, for example, bottle caps, fabric scraps, gift wrap, strawberry baskets, ribbons and toilet paper tubes, as well as tools such as scissors, glue, staplers, tape and hole punches. As design thinkers, tinkerers and makers, children have the opportunity to explore found materials that are available in their everyday life at Bing Nursery School, much to the benefit of both the children and the environment.

Found materials can engage young children in an exploration of scientific phenomena and natural sciences in an engaging, developmentally appropriate way. Additionally, teachers and children can discuss the importance of recycling and raise environmental awareness in the children who will be the stewards of our planet. Through hands-on “take apart,” young children make sense of technology by taking apart non-functional appliances like toasters, sewing machines and CD players.

Children have the opportunity to engage socially as they explore found materials. They share techniques, model the use of tools and materials and collaborate with one another, especially when making props to use in pretend play. Daniel demonstrated the social value of these materials as he created his own props for imaginative play.

Initially, Daniel did not have a plan for...
what he wanted to make, but when he noticed a long strip of matte board, he decided to explore all the different things the strip could become:

He used a piece of tape to hold both ends of the strip together. “Look, it’s a crown.”

He folded the strip at angles. “Now it’s a square!”

He made a smaller circle with the strip and held up to his forehead, transforming it into “a cyclops’ eye.”

He curved the strip one way and then the other and it became “an ‘s’!”

Then he turned it upside down and quickly discovered that “A hook is an upside down ‘s’!”

After Daniel’s initial exploration with the strip of matte board, he decided to use a variety of materials to make a prop for imaginary play. After he had constructed his “squirt gun,” Daniel articulated in detail what he had made to his friends.

“It’s a squirt gun that shoots out water when you push this button. It comes out through this little rectangle. You don’t even have to fill it up with water. You can see the water fill up in the window. It just goes through the pipes all around in a circle near the button and then it goes through a pipe that leads to here. You know how far the water can go? 60,000 miles away from where you are! And it’s so strong that if you shoot someone, it can knock them down but it doesn’t really hurt them because it’s just water!”

Exploring found materials benefits young children’s emotional development by building a sense of “creative confidence.” It gives children a sense of pride and accomplishment when they innovate, when they make something unique, when they struggle and succeed. According to Sir Ken Robinson, a British educator, “teaching creativity is as important as teaching literacy.” Robinson feels that children are born with tremendous talents and creative capacities. It is vital to our future that this innate creativity, in all its diversity, be encouraged to develop and flourish.

Repeated experiences with recycled materials allow children not only to learn the characteristics and properties of each material, but also to consider other perspectives to their work. Recycled materials naturally invite reflection. When children have opportunities for revisiting concepts they can remember their previous experiences, ideas and strategies. Ascertaining children’s intentions and interests, teachers have an opportunity to decipher children’s pertinent and relevant meaning imbued in these experiences. When engaged in using recycled materials as a community, a shared aesthetic, vocabulary and collaborative creative spirit can develop!

Teacher Stephanie Holson’s notes on the benefits of found materials for young children contributed to this article.

A History of Found Materials

From the beginning of time, people have recycled, repurposed and reused, making their homes, clothing, utensils, toys and art from what was readily available in their environment. The resourcefulness and ingenuity of people who invent out of necessity are present all over the world today, especially in the developing world. Jugaad, the Hindi word for an innovative, improvised solution born from ingenuity and cleverness is called *zīzhū chuàngxīn* in China, *gambiarrá* in Brazil, *juá kài* in Kenya and DIY in America. All carry on the tradition of *bricolage*, the French word for using what is at hand. In fact, the endurance of humankind is testament to the ability to think frugally and flexibly to develop innovative solutions.

Artists have historically used recycled or found materials in their work: the paper collages of Picasso and Braque, the shadow boxes of Joseph Cornell, the sculptural wood collages of Kurt Schwitters and Louise Nevelson and the assemblages of Robert Rauschenberg. Self-taught, or “outsider” artists, have incorporated recycled materials into their work because they are affordable and readily available. Martin Ramirez, one of the greatest “outsider” artists of the twentieth century, whose work has been showcased in major museums all over the world, was institutionalized for most of his life and “discovered” by a visiting psychologist. He managed to make art in spite of his circumstances from what was at hand, including examining table paper and glue made from potatoes and water. Environmental artists Andy Goldsworthy, Jim Denevan and Patrick Dougherty have all used materials found in nature in their art.

Teachers of young children have long recognized that found materials have value for children’s creative self-expression. In 1968, renowned Japanese American sculptor and San Francisco art educator and activist Ruth Asawa co-founded the Alvarado School Arts Workshop. It was an innovative program that involved parents and professional artists in the public schools. They started with almost no money and throwaway objects—milk cartons, egg cartons, scraps of yarn, and flour, salt and water. They spent the summer working with baker’s clay, an inexpensive and safe material used to introduce children to sculpture.

Asawa became a member of the San Francisco Arts Commission and began lobbying politicians and charitable foundations to support arts programs that would benefit young children and average San Franciscans. At its peak, the workshop was in 50 public schools in San Francisco. It employed artists, musicians and gardeners and recruited thousands of parents to be involved in public education. Four decades later, the San Francisco Arts Education Project, inspired by the Alvarado Arts Workshop, operates in more than two dozen San Francisco schools and reaches over 7,500 students a year with its vibrant arts education program.

Today’s teachers have access to many resources for recycled materials to use in their classrooms. Recycling centers specifically for teachers, like SCRAP (Scrounger’s Center for Reusable Art Parts) in San Francisco and RAFT (Resource Area for Teaching) in San Jose, are a direct result of the early efforts of Asawa and the parents, teachers and professional artists who recognized the importance of recycled materials as a resource for young children’s creative expression.
Teachers in play-based programs take the lead from children in guiding the curriculum. They observe, listen and wonder about what ideas children seem to be interested in pursuing. Themes emerge in their play as they develop relationships with each other, learn what they can do with the classroom materials and agree upon scripts and activities. Often what teachers are searching for is something that they could explore in more depth as a “project.”

The Project Approach typically involves an in-depth investigation of a real-world topic where children develop theories and hypotheses based on their experiences and their understanding of information provided while teachers facilitate and guide this process. It is a collaborative process that focuses on building dispositions for curiosity, theorizing and persisting just as much as acquiring knowledge. However, project work requires teachers to be constantly searching for the meaning that the project has for children, so that they can plan and guide the direction of the curriculum in a way that sustains children’s interest and engagement. At the same time, teachers must remember that a project is only one strand of what unfolds at school on a daily basis and not all children will be invested in or captivated by the project. It can be easy for a teacher to become a bit myopic and begin to see everything in the classroom through the lens of the project, or continue to offer project-related activities and experiences without noticing if the children’s interests have waned. With these considerations in mind, we look to the play unfolding in the classroom for what is intriguing or inspiring to the children.

This year in East AM, we saw that the children enjoyed using yarn and string at the design table, most often using these materials either as decorative elements, a means to connect objects, or a functional necessity to attach to a paper kite. Early in the winter quarter, a few children began to punch holes along the edges of their paper and thread yarn through these holes. As often happens, children inspired each other to try new things and soon a handful of children were returning to this activity over the course of a week. Thinking that others might also enjoy it, we provided other opportunities for threading or weaving. The children were very interested in using vinyl ribbon and yarn to weave in and out of large panels of garden netting, an activity that encouraged collaboration since the ribbons needed to be pushed and pulled through openings on both sides of the panel. Children were also offered paper, cellophane and felt strips, both for open-ended exploration and for teacher-facilitated activities such as paper sculptures and simple loom weaving.

Playing with string and similarly shaped materials provided hands-on experiences with fundamental concepts of line and curve: strings can weave in and out and over and under other materials; they can pull, connect, hang, hold or measure things; they can be straight or curved, bent or rigid; they can be braided, twisted, wrapped or tied; and they can be used to represent objects, ideas or actions. The more we observed children engaged in both the unstructured and structured uses of these materials, we realized that this emerging “project” was not really an in-depth study of string per se, but was more focused on both children’s and teachers’ understanding of how strings might be employed. For instance, we noticed many of the children creating items with string indoors and bringing those creations outdoors to use as props in their play. Whether it was a string for a kite, a rope for nunchucks or a bow tied around a scroll of paper, the string was getting its fair share of outdoor time. Bringing the rolls of yarn, string and ribbon outdoors seemed a way to further their interests in using the materials in their outdoor play.

One of the interesting ways string was employed was when a group of children began to use a spool of yarn in a large-scale decoration of the climbing structures, transforming them into spaceships. Wing shapes, curtains, a touch of color and other ideas were explored in their new artistic and engineering endeavor. Not only were the children working toward a common goal, but each child also negotiated ideas, took turns and accomplished smaller tasks that together helped to create their collaborative representation of a spaceship.

In the ensuing weeks this interest in using string, yarn and ribbon as outdoor decorative elements expanded to decorating the trees, a rabbit hutch and our new deck. Sometimes children did this for the purpose of exploring the aesthetics and properties of the materials—for example, discovering that yarn will stick to tree bark without adhesive or tying. But more often than not, they used the materials in the employ of their play: using string to make a trapeze for an animal circus and a haunted rabbit house and trailing ribbon behind a running child to denote the speed of a rocket laser.

Throughout this exploration, we presented new materials and techniques to work with them, and the children turned these into meaningful and interesting experiences. They added new skills, vocabulary and ways of thinking about these materials to their repertoire. We found that in nursery school, “string theory” means with enough string and a little imagination you really can do just about anything.
At Bing Nursery School, we often talk about giving children the “gift of time,” ample time without interruptions to explore, problem solve and grow. On Oct. 19, 2012, Bing staff members were given our own “gift of time” to grow and develop together professionally through our quarterly staff development day. Conversations about diversity, presentations about ongoing research and discussions on using music in the classroom were highlighted. Through these activities, the teachers were able to take the time to work through some challenging and thought-provoking ideas together.

In the morning, Monika Nagy—a teacher, diversity consultant and Bing parent—led a session with the teachers. Together we laid out ground rules for the session and our interactions with each other. These included being sensitive to different perspectives, being willing to authentically share ideas with the group and feeling comfortable asking clarifying questions. Then we dove in to difficult conversations about diversity, focusing on social identity factors known as the “Big 8”: ability, age, class, ethnicity, gender, race, religion and sexual orientation. We finished the session knowing we wanted to make more opportunities to continue the conversation.

Next, the teachers heard from two Stanford researchers about their studies on young children’s understanding of language. Ali Horowitz, a third-year psychology graduate student with a focus in developmental psychology, shared her study, “Learning from Speaker Word Choice by Assuming Adjectives are Informative,” which she has been working on in the Language and Cognition Lab with professor Michael Frank, PhD. Her study looks at how children learn from adjectives. Specifically, she is interested in whether children use adjective information to infer implied contrasting dimensions. For example, in the sentence “This is a tall glorp” (a made-up word) the adjective “tall” lets us know that height may be an important dimension of contrast to attend to and allows us to infer that glorps may also be short. Making an inference that an adjective implies contrast means that children must identify a feature that differs along the same property dimension as the adjective used (in this case, a short glorp). Horowitz has found differences in 4-year-olds’ sensitivity to implied contrast from adjective use. Children were shown a picture of a pretend alien that was described using either a size or color term. They were then shown two similar pictures, one that differed from the first by size and one by color, and were asked to choose which they thought was another example of that type of alien. Children younger than 4-and-a-half tended to choose the picture that matched by color regardless of the adjective used, but older children were better able to overcome this bias and infer contrast with the referenced adjective category. This may be due to familiarity with the contrast properties, as children seem better able to select by adjective contrast with early-learned opposite pairs (e.g., dirty/clean). The ability to infer implied contrast dimensions may help children to learn about informative properties of new objects.

The next presentation came from researcher Marisa (Middy) Casillas, a fifth-year graduate student in linguistics working with professor Eve V. Clark, PhD. (Casillas has since graduated and is currently a post-doctoral fellow in the Netherlands.) She shared two different studies with us: “Children Use Hedges as Cues to Category Membership” and “Watching Conversation and Taking Turns at Speaking.” In her first study, Casillas looked at how children understand and interpret hedge phrases such as “sort of” and “almost.” In one example, the researcher showed children a butterfly, a moth and two other images that are also insects but do not resemble a butterfly, and then invited children to choose which picture was “sort of” a butterfly. Children who understood “sort of” as a hedge inferred that the moth was the correct choice. Casillas found that 5-year-olds consistently use hedged information like adults, but that 3- and 4-year-olds had more difficulty interpreting the hedge phrase and most often chose the butterfly instead of the moth. Casilla’s second study uses videos and eye-gaze tracking to look at children’s ability to follow and anticipate turns in conversation. Initial findings point to children’s ability to track speakers and anticipate upcoming turns at age 3, and it seems that their delays in responding during conversations may come from the need to plan and produce a response.

The final presentations were on different ways to use music in our classrooms. Teacher Kitti Pecka led a yoga practice incorporating songs, stories and games that young children enjoy. Musical movement and games like these help engage visual, auditory and kinesthetic learners. Next, teacher Nandini Mukherjee demonstrated ways to introduce drums, guiros and xylophones into music time. She noted that there is a balance to encouraging children to manipulate instruments while also providing structure and teaching respect for the materials. Assistant Director Beth Wise led singing activities and reminded us that teachers don’t necessarily have to be musically talented in order to enjoy singing with children. She also talked about activities that encourage cross lateral movement or “crossing the midline,” which is the ability to cross one part of the body into the space of another. Crossing the midline utilizes and strengthens both the right and left hemispheres of the brain and is important in the development of cognitive skills. Wise provided examples of songs that encourage eye-hand coordination, musical story plays and work with various tempos, pitch and sound recognition.

This day gave us the chance to come together as teachers and learn with each other and from each other. Staff development days like this one help us continue to learn and develop as educators and immediately apply what we’ve learned in our classrooms.
Learning and the Brain Conference: Adults as Models in Cultivating Creativity
By Sheilan Kazzaz, Teacher

Most people live, whether physically, intellectually or morally, in a very restricted circle of their potential being. They make very small use of their possible consciousness, and of their soul’s resources in general, much like a man who, out of his whole bodily organism, should get into a habit of using and moving only his little finger.” This observation by noted psychologist and philosopher William James speaks to the immense and drastically underestimated potential within all of us.

As educators at Bing, we live by the philosophy that every child is creative and capable, and that interacting with them with this understanding encourages them to truly believe it and thrive. So why don’t all of us believe deeply in our own creativity, capability and potential as adults? Yong Zhao, PhD, associate dean of the College of Education at the University of Oregon, touched on this inconsistency in his keynote address on using brain science to ignite innovation and imagination at the February 2013 Learning and the Brain Conference. He noted that “as you age, you ask fewer questions, you laugh less of yourselves and their world. Many of us are able to see the innate creativity and potential in children, but somehow we lose that vision of people as they mature.

We are as creative as we allow ourselves to be; and in turn, our children will only be as creative as we enable them to be. This was a central theme of the conference, held in San Francisco Feb. 14-16, which had 1,500 attendees, including the entire Bing Nursery School staff on Feb. 15 for our winter staff development day.

Educators such as Tony Wagner, EdD, have advocated education reform with a focus on creativity, in order to prepare children for a more competitive workforce in which mere subject knowledge is no longer a sufficient skill to guarantee employment. Others stress that workers in the 21st century must be knowledgeable, innovative, collaborative, artistic, playful and insightful. Unfortunately, faced with these imperatives, educators are still asking how. Many want a strategy because, quite frankly, it seems they don’t believe that they are naturally equipped to teach those skills. How is this generation of educators supposed to teach a set of skills that they don’t believe they have? This conference brought to light three strategies for enhancing children’s creativity, and made the point that for ultimate effectiveness, adults and educators should follow them too.

First, know yourself and be yourself—the best, most authentic version.

In Zhao’s keynote address, he summarized his approach to education reform, stating, “Education is about enhancing every person’s interest, pattern and curiosity. Make them better than themselves.” At Bing, we follow that principle every day with a child-centered, play-based philosophy, because every individual is more likely to learn and remember what was learned when it happens in a personally relevant, exciting and meaningful way. If learning comes about through intrinsic motivation—from one’s own desire—it creates a positive association that is clear and meaningful and increases the potential of future learning.

To be one’s best self, happiness is essential. Without enjoyment, says keynote speaker Christine Carter, PhD, sociologist, author, and director of UC Berkeley’s Greater Good Science Center, innovation and creativity cannot happen. This is why play is so essential to learning and to fostering creativity. It is the way in which individuals make sense of the world around them and it demonstrates their intrinsic motivation to learn, and to enjoy it. Another key to being one’s best self is to “rest, relax, and let your mind wander,” according to keynote speaker Nancy Andreasen, MD, PhD, psychiatry department chair and director of the Neuroimaging Research Center and Mental Health Clinical Research Center at the University of Iowa Carver College of Medicine. REST, which stands for “random episodic silent thought,” allows for the consolidation of learning and memory and provides insight into “the incubation period of the creative process.”

In addition to REST, an important step to being one’s authentic self is recognizing one’s strengths and following where they lead. Madeline Levine, PhD, psychologist and author of The Price of Privilege, noted in her address that “we [parents] spend way too much time trying to make up for kids’ weaknesses and not enough on their strengths.” This message to focus on strengths applies to individuals of every age and ability, as echoed by many other speakers at this event. Especially for people with learning styles that might typically provide more challenges in a traditional classroom setting, a strengths-based approach is essential to maintaining a sense of possibility with regards to learning. One example of such a person is what guest speaker Lucy Jo Palladino, PhD, award-winning psychologist and author of Dreamers, Discoverers, and Dynamos, referred to as a “divergent-dominant thinker.” Divergent thinkers, says Palladino, might struggle in the classroom due to challenges with focusing on one linear train of thought at a time and organizing ideas in an orderly way. It is important to nurture their learning process by focusing on positive reinforcement and by using a strengths-based approach. After all, divergent thinking is fundamental to the creative process; by definition, one’s thinking must diverge from the norm in order to generate a novel idea.

Second, keep an open mind, be willing to shift frames, and challenge assumptions.

Open-mindedness, much like divergent thinking, is a cornerstone of the creative process; one gives rise to the other. One reason why adults seem to become less creative with age is they accumulate filters,
The idea that creativity hinges upon the mindset and practice of challenging oneself is extraordinarily important; a simple frame shift, or a challenge to the typical thought process, can yield countless new answers.

**Third, take risks and challenge yourself.**

Much like the need to challenge our every assumption, creativity hinges upon the mindset and practice of challenging oneself. As adults and educators, we ask children every day to take a risk, try something difficult and cope with inevitable failures. This is tantamount to the learning process. If adults and educators do not place themselves in this same uncomfortable position, they don’t stand to learn anything new, or to connect to the creative process or to the children in whom they are trying to foster that creativity. Then, as Seelig put it, we can “mine all the data [read: failed results] from our experiments to allow us to move forward in a successful way.”

It seems now that the way to tap into our inherently creative self-selves is to regress to childhood, if only figuratively. The skills and practices that this conference highlighted for cultivating creativity in children are equally applicable to adults, if not slightly more uncomfortable, as they involve stepping out of their highly filtered shells. Says Seelig, “People think that creativity is something mystical that we can’t understand. However, it isn’t magic! It is the result of a set of skills, attitudes, and environmental conditions that help us unlock our natural ability to generate ideas.” Creativity isn’t a spell cast over us, or a magic trick that we passively experience; it is real, knowable, changeable and interactive in nature. It may be scary for us to take creative risks, but it will help both this and future generations to step up to be their most creative selves. “People think about creativity in the same way that they think about magic. We have to break the spell.” Stepping out of our shells and shaking assumptions is key to breaking this spell and beginning to see past the smoke and mirrors of this fixed mindset towards creativity.

One way to step out of one’s self-critical shell and unleash a creative spirit is to take a hint from improvisational theater, allowing ideas to flow freely without being filtered first. In his lecture, Ben Bernstein, PhD, a psychologist and theater director who trained under the “mother of improvisational theater,” Viola Spolin, extolled its virtues for nurturing creativity. The applications of improvisation aren’t just limited to the realm of theater: We can adopt the spirit while preparing dinner or playfully interacting with a child. For me, those scenarios have more often than not yielded delicious new recipes and catchy educational jingles… and when they haven’t, no one was worse for the wear. The key is to simply approach from a playful place: an attitude of pure enjoyment.

We as adults and educators need to take a cue from Spolin and “reconsider what is meant by talent. It is highly possible that what is called talented behavior is simply a greater capacity for experiencing. It is by the increasing of the individual capacity for experiencing that the untold potentiality of the personality can be evoked.” What better way to increase our capacity for experiencing, and thus increase our talents, than to take risks, challenge ourselves and let our walls down? For those of us feeling like we could stand to better live up to our potential, why wait? We’re bound to surprise ourselves.

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**Spring Staff Development Day: Research Update**

By Cole Murphy-Hockett, Teacher

This spring, three Stanford graduate students updated Bing teachers on their research in developmental and social psychology at the nursery school. The presentations took place at Bing’s staff development day on April 29.

Rodolfo Cortes, a fourth-year PhD student working with psychology professor Carol Dweck, PhD, has been researching how young children interpret and assimilate social roles—that is, how they come to understand that certain types of people do one thing and other types of people do other things. [For more information on Cortes’s research, see page 5.] Cortes also researches the connection between temperature cues and race-based in-group favoritism. He has found that children and adults alike change their preference for faces depending on whether they are given a cold or a hot water bottle to hold.

Eleanor Chestnut, a first-year PhD student working with psychology professor Ellen Markman, PhD, is interested in how adults use language to implicitly communicate ideas to children. Chestnut explained how one’s choice of words often implies facts or knowledge that is not explicitly communicated. The position of a noun in a sentence can provide information about the familiarity or spatial relations of the objects. For example, it makes more sense to say “a zebra is like a
horse” than to say “a horse is like a zebra” because a horse is a more familiar animal. Likewise, one says that “the bike is next to the house” because saying “the house is next to the bike” implies that the bike is gigantic and the house is small.

It has been shown that adults can infer information about novel words based on implicit information. For example, if shown a picture of a house and an animal and told that “the dax [a made-up word] is across from the blicket,” participants will assume that the dax refers to the animal and the blicket to the house. Chestnut is interested in how children process similar types of sentences. Her research has found that even 5-year-olds are relatively well tuned in to these semantic cues and can extrapolate more from adults’ utterances than just what they are explicitly told. Chestnut is exploring how children may assimilate gender stereotypes from these cues. She noted adults often say that girls can be just like boys, for example, girls can be scientists, too, as a way of encouraging girls to participate in science—or other male-dominated fields. This strategy may be backfiring, however, because it may just be another way of subtly suggesting that boys are more typical, more standard, or better in these roles than girls.

Taylor Holubar, a fourth-year PhD student also working with Markman, has been researching how children interpret subjective opinions that are presented as if they are facts. Central to his research is the concept of naïve realism—that our own opinions are correct and that others don’t hold the same beliefs are either biased or lack the appropriate information. While children are often egocentric, even very young children can correctly interpret another’s wishes when given enough information. For example, 2-year-olds will give an adult researcher a “boring” toy if they have evidence that the adult will like the toy. Holubar has explored how children process subjectivity by analyzing their responses to a variety of factual and opinionated phrases. He presented subjects with true and false facts (e.g., “milk is white,” or “milk is green”) as well as conventional and unconventional opinions (e.g., “I like ice cream,” or “I don’t like ice cream”). Opinionated phrases were either clearly marked as subjective (“I like ice cream”) or lacked a marker (“ice cream is good”). Holubar found that younger children (3- and 4-year-olds) typically process unconventional opinions the same way as they do false facts, regardless of marker. Slightly older children (5-year-olds), however, can understand and process unconventional opinions when given a clear marker of subjectivity. That is, they understand that, while the opinion may be different from the norm, it is a valid expression of how the speaker feels. This research is important for our understanding of how children begin to process conflicting information or opinions.

CONFERENCES

Highlighting Play: The 2012 NAEYC Annual Conference and Expo

By L. Jasmine Dobbs-Marsh, Teacher

Play is a set of behaviors that are freely chosen, personally directed and intrinsically motivated.” (Almon, Bundy, Sullivan & VanderMolen, 2012). At Bing Nursery School, children play. Our school’s educators and parents value play and all that it adds to children’s learning and development. Outside this community, however, play is being removed from many children’s lives. In November 2012, the National Association for the Education of Young Children held its annual conference and exposition in Atlanta. Thousands of educators gathered to share knowledge, build community and advance early childhood education. Play was at the forefront of the conversation, a common theme running throughout the many lectures and seminars featured at the conference.

In their presentation “Promoting Play in a ‘Race to Nowhere World,’” play advocates Joan Almon, co-founder of the Alliance for Childhood, and Blakely Bundy, Liza Sullivan and Robin VanderMolen, from the Alliance for Early Childhood, discussed the state of play in the United States and what their organizations are doing to bring play back into the lives of young children. The information and ideas presented by Almon and colleagues resonated with our play-based philosophy and the work we do at Bing.

There is no doubt that we live in a competitive environment. In the Bay Area, as in the United States as a whole, opportunities for children’s play are disappearing. Schools eliminate recess so children have more time for “real” academic learning. Children increasingly spend free time as screen time and miss out on valuable opportunities for play. Commercial culture delivers a broad range of single-function toys that limit creativity rather than expanding it. Even well-meaning parents with the resources to provide their children with remarkable learning opportunities schedule time in ways that reduce children’s access to play, which is ultimately detrimental to children’s development. With the best of intentions, many parents fill up their children’s days with a host of activities, structure their playdates to make sure that they “go well” and begin preparing children for academic success in high school and college before they even reach elementary school. Important time to process learning is used up in transportation to the next activity and opportunities for spontaneous play are often lost.
Why is this a problem? What is lost when play disappears? Almon, Bundy, Sullivan and VanderMolen laid out the detrimental effects of life without play for young children. Lack of play impacts physical development, leading to lack of coordination, obesity and weaker bones among children who have fewer free play experiences. Lack of play impacts social development: The amount of unsupervised, unstructured play that children engage in is highly correlated with later ability to interact directly with others and resolve problems in a work environment. Lack of play is also detrimental to creativity: Flexible, open-ended play allows children to explore, develop and test ideas, to think critically, to be inventive and to inspire themselves. Creativity is the top trait that CEOs of major companies look for when hiring new employees. Lack of play influences memory and learning: During unstructured play a child’s brain rehearses connections that have been made during instruction, moving new information from short-term to long-term memory and strengthening neural connection to that information. Beyond its contributions to physical, social and creative development, play actually contributes to formal academic learning.

During their presentation, Sullivan and VanderMolen described the “Let’s Play Initiative,” a project that Alliance for Early Childhood implemented to bring play back to children in a Chicago community. The Alliance for Early Childhood’s community is similar in some ways to the Palo Alto and Peninsula area. It is an affluent and academically competitive environment where play is removed from children’s lives not due to lack of resources but because of lack of understanding. The initiative focused on communicating to parents the importance of play, creating opportunities for family playtime and building activity programs that allow children to spend extracurricular time engaging in play.

Opportunities for family playtime were created through “Park-a-Day” challenges. The organization puts on events at local parks, provides open-ended materials for children to interact with and supports children’s play with a staff of adult “play workers.” Play workers guide play in an unstructured way that gives children the independent and adventurous time they need while providing a secure environment that puts parents at ease. Because of the strong appeal of extracurricular activities in its community, the group created “After School Recess,” an extracurricular activity engineered to give children the opportunity to build their play skills and develop the self-direction, self regulation, social negotiation and problem-solving abilities that they could bring to future experiences.

Children need play. Play fosters children’s growth—physically, socially, cognitively and creatively. As a result of the disappearance of early play experience, children increasingly need to be taught how to play when they arrive in play-based learning environments and they increasingly lack the socio-emotional, self-regulatory and self-motivational skills that are crucial for later learning. Bing provides an opportunity for children to reclaim play and to learn through play. However, Bing is a nursery school and provides play to children for only a discrete period of their lives. After that, children move on to elementary schools, middle schools and high schools that by their nature focus on academic learning, even if they understand the value of play. Parents are in a remarkable position to maintain play as an integral part of their children’s lives. By continuing to set aside time for children to play independently and without structure, by educating themselves about the benefits of free play and by recalling that play is one of the elements that will lead their children to successful futures, parents can be lifetime play workers.

The 2012 NAEYC Annual Conference and Expo featured two presentations by Bing Nursery School staff:

- Block Building: A Cornerstone of the Curriculum by Jennifer Winters and Todd Erickson
- ReCycle, RePurpose, ReUse: Incorporating Found Materials for Creative Expression into the Preschool Curriculum by Nancy Howe, Jasmine Dobbs-Marsh, Stephanie Holson, Mark Mabry and Chia-wa Yeh

Visitors from Abroad

From left: The president and dean of education from Srinakharinwirot University, a leading education institute in Thailand, as well as administration from several of the university’s demonstration schools visited Bing Nursery School in January 2013. Among those pictured are Chalermchai Boonyaleepun, MD, president, (sixth from right), and Bing staff Jennifer Winters, director of Bing (center), Beth Wise, assistant director (sixth from left), and Chia-wa Yeh, head teacher (second from left). Sixteen administrators and educators from the Poppins Nursery School in Japan visited Bing in November 2012. Among those pictured are Noriko Nakamura, president of Poppins Corp. (back row, fifth from left), and Bing’s Winters, Wise, Yeh and Karen Robinette, head teacher (back row, fourth from right).
The Society for Research in Child Development Biennial Meeting

By Emma McCarthy, Teacher

This past April’s meeting of the Society for Research in Child Development focused on the growth of research on child development around the world and on the “multiple levels” approach to research. The impact of immigration on youth, global perspectives on resilience, and bullying interventions in diverse regions of the world are a few examples of this trend towards a more global and diverse field of study. The biennial meeting, hosted in Seattle, featured the work of over 1,000 different researchers representing 67 countries.

In her opening address, Ann Masten, PhD, president of the society, described the “multiple levels” approach as one that will “span levels of analysis and species, engage multiple disciplines and give important new traction to the goal of understanding dynamic processes that shape development, from the molecular level to neural function to social ecology.” This theme permeated the event. The sessions on early child development showed how development could be seen through drastically different lenses. From research focused on the teacher-child relationship in pre-K classrooms to research on the development of cooperation in young children, many topics relating to our work at Bing Nursery School were addressed.

Another topic highlighted by many studies was the importance of translational research. This approach to scientific research connects findings in a way that offers practical applications to improving human health and well-being. For instance, practical implications for policy implementations could emerge from a study by Kathleen Rudasill, PhD, “Temperament and Teacher-Child Relationship Quality in Preschool: The Moderating Roles of Classroom Emotional Support and Family Income.” Mary Ann Evans’, PhD, study of electronic books could drastically improve e-books through its advice to ramp up the quality of the digital sounds, decrease distractions and incorporate embedded mnemonics on tablets. Highlighted here are a few especially poignant studies from the multitude presented.

One particular study of interest was a German study, “Children’s Collaborative Problem Solving,” conducted by Felix Warneken, PhD, on the development of early collaboration and behavioral coordination between children performing group tasks. The task itself offered two children a joint goal of retrieving a desired item via collaboration. Each child performed a separate but necessary task in conjunction with the other to retrieve the item. Warneken found that across the 2- to 5-year-old range, each age cohort was capable of completing the collaborative task, and as they matured they needed less help. Children younger than age 2 needed specific demonstration and guidance along the way. At age 2, fewer affordances were sufficient, and by age 3, the children are able to perform the task without social demonstration. Furthermore, Warneken found that at age 3, there was no division of labor before the task, but by age 5, the children were negotiating roles and dividing the labor prior to the task with verbal and social cues. The findings conclude that there is a major shift in ability to plan collaboratively by age 5. The learning effect is that in some situations, one has to collaborate to be successful and that communication is the coordination device. A similar study presented by Tamar Kushnir, PhD, and Christopher Vredenburgh, PhD, looked at the bids for collaboration based on verbal cues, eye contact, statement of difficulty, as well as other factors.

Another session included the presentation of two interesting studies including “Control Yourself to Play Together: Executive Function Skills and Neural Correlates Involved in Collaborative Activity in Toddlers,” researched by Marlene Meyer, PhD, and “Controlling Actions and Acting Together: Bidirectional Links Between Executive Function and Social Interaction in Development,” researched by Sarah Gerson, PhD. The discussion focused on collaboration as well, but in the context of the brain. Executive function speaks to the brain processes involved in future planning, inhibition and self-regulation. The Meyer study found that with effective support from adults on executive function tasks, children gained pride and had the ability to practice tasks that allowed them to feel empowered and eventually complete these tasks on their own. An example of a task would be waiting for a turn to speak in a small group. The support given was a physical object that the children would hold to denote the speaker and the listener, providing a visual cue as a reminder of the task. Gerson’s study revealed that there was a bidirectional effect between social interactions and executive function. For example, older children in a classroom setting, if given the opportunity to be a role model, feel encouraged and valued and can help younger children perform tasks. In contrast, the older children may not exercise as much planning if the adult is always the partner to their task. These social interactions can improve executive function, and the executive function skills can then improve social interaction.

The key point of this symposium was that teachers need to be trained to scaffold...
or in other words, support—children’s learning in a thoughtful way that empowers children to plan and take on tasks on their own without the fear of failure. The messages of “I know you will succeed, I’m there with you” and “we can do this” are two very important ideas that many children aren’t hearing, especially those with low socio-economic backgrounds. Both Gerson and Meyer revealed the importance of language skills and peer social interactions as key experiences that teachers can offer through storytelling, scaffolding and articulating to children how much they are respected and valued as individuals.

In a concluding event, a roundtable discussion moderated by Michael Pluess, PhD, “Positive Child Development: More than Resilience?” poignantly broached the subject of the future of the field of developmental psychology. Has a past and current focus on resilience impacted the way we view the development of children by means of dichotomizing the standard outcomes into regular and disordered? The panelists, Jeanne Brooks-Gunn, PhD, Alan Sroufe, PhD, Frosso Motti-Stefanidi, PhD, and Mark Greenberg, PhD, all major leaders in the field of developmental psychology, promoted the shift to a focus on positive development and striving for a more accessible and applicable shift in research. The feel in the room by the end of the discussion was one of excitement, hope and encouragement. The panelists’ final call to action was for each person in the room to go out and submit a paper on positive development to a child development publication to encourage the next shift in the field.

As a teacher at Bing, I was encouraged by and strongly believe in the Bing philosophy and approach. The conference showcased how much research is going on around the world that could impact the future of policy relating to early child development, and how much this research focuses on more than numbers; it focuses on the heart and soul of this stage of life. This brings us back to all of the thoughtful research happening at Bing every day. Our community is a part of this growing body of work that not only contributes to our knowledge of child development but can also shape future policy.

CAEYC Conference
By Stephanie Swenson, Teacher

“Make a Difference! Motivate. Educate. Advocate,” is a slogan that epitomizes and inspires the work of early childhood educators. In fact, it was the theme of the 2013 California Association for the Education of Young Children’s annual conference and expo held March 14-16 in San Jose, Calif. Aimed at both educators and administrators, with more than 1,000 attendees, the three-day conference featured presentations on a wide range of topics, from teaching children about nutrition to the role of superhero play in preschool, from new ideas for circle time to incorporating math into the classroom, from achieving school accreditation to supporting children’s emotional growth. I was honored to make presentations on two different subjects—a talk on a general strategy to improve our practice and a workshop on improving communication with young children.

On March 15, approximately 30 teachers and administrators heard about my experiences using the inquiry process to evaluate and modify story time in my classroom, West PM, during the winter and spring of 2012. In the inquiry process, teachers reflect upon a topic in their practice where they feel improvement can be made, make changes and then assess how those changes have affected their classroom. The West PM teaching team decided to investigate story time in our classroom, experimenting with the seating arrangement, structure and timing, with a goal of studying group engagement. The presentation, “Using the Inquiry Process to Create Change in Early Childhood Classrooms: A Case Study on Group Time,” concluded with reflections on how our teaching team used this process and how the attendees could take this process back to their own classrooms. I was glad to be able to share the importance of actively reflecting on what we do as teachers to help improve both children’s classroom experiences and how early childhood educators feel about their practice.

On March 16, a standing-room only audience of over 150 teachers attended my workshop, “Positive Behavior Management through Communication: A Guide to Speech for Early Childhood Educators.” Attendees came to hear about basic guidelines for communicating with young children, along with how to deal with some trickier situations common in the early childhood classroom such as conflicts between children and what to do when a child acts in an inappropriate manner. Adapted from a talk for parents I gave in winter quarter for the Bing Institute on promoting effective communication with children, the presentation was aimed at new teachers, with tips for speech and action when working with young children, particularly when their behavior is less than desirable. Attendees were treated to video clips of Bing teachers employing the guidelines described in my talk, demonstrating the speech and body language we use at Bing and its effectiveness when working with young children. The talk concluded with a “let’s practice together” section where teachers could reflect upon what they learned and make an effort to change at least one common phrase they use with children to a more effective one.

Visitors from Abroad

Thirty-five administrators and teachers of preschools in Shanghai, China visited Bing in July as part of their study tour.
By Adrienne Lomangino, Head Teacher

A Glimpse of the AERA Annual Conference

Bing teacher Beverley Hartman and I joined over 15,500 registrants at this year’s annual conference of the American Educational Research Association. The event, Education and Poverty: Theory, Research, Policy, and Praxis, took place in San Francisco April 27-May 1. The conference topics spanned from preschool through higher education, with each time slot offering sessions of interest to early childhood educators.

The topics of these sessions varied widely, including teacher research as a form of professional development, the effectiveness of long-term interventions, inclusion and special education, thinking and problem solving, the role of play and physical activity in preschool and kindergarten and cultural beliefs about body and personal space in the classroom.

A paper by Margy Whalley, PhD, “The Voices of their Childhood,” particularly resonated with the hopes teachers at Bing have for their students. This paper described a study exploring the meaning early childhood experiences had for individuals. The study was conducted at Pen Green Children’s Centre, which, like Bing, has a child-centered, responsive philosophy and desires to set children on a path toward seeing themselves as capable, respected learners. In a child-centered program, children have the opportunity to choose activities of interest. The teachers attend closely to the children’s choices. They then provide guidance and support in response to what the children are saying and doing. In contrast to Bing, Pen Green Centre is situated in an impoverished community in England.

The school’s staff strongly desired to empower children whose families struggled with a sense of powerlessness due to poverty and unemployment. The center adopted the following principles as central to their work: Children should feel strong, in control, able to question, able to choose and “feel good about being me.” However the staff also wondered how this effort toward empowerment would affect children once they entered the elementary school system, where compliance tends to be valued more than speaking one’s mind. In a qualitative examination of children’s experiences after entering elementary school, Whalley and her colleagues asked, “What was significant about our engagement with the children and their families?” In addition, “What continues to be significant to those young people and their families?”

To conduct the examination, the researchers invited alumni who were 8 to 21 years old to visit the center with a friend who also attended the center. The alumni met with a teacher who had been central to their experiences and viewed video and photographs of themselves during their experiences at the center. Viewing the video and photographs was a way to encourage memories and discussion about their experiences. The researchers examined two groups of alumni and their parents. One group included children with whom the researchers had had a close relationship. The parents of these children were actively engaged with their children’s education at home and at school. The second group included children whose families had utilized support services and had been engaged in activities designed to promote parents’ mental health and/or educational services for themselves. The children in this group had experienced difficulty with the transition into the school system. The researchers were particularly interested in how the second group viewed their experiences at the center in relation to their later transition to elementary school. More specifically, they inquired about participants’ view of teachers and perceived gaps in their preparation for later schooling.

Through their exploration with these alumni, the researchers saw several themes emerge. Students in the first group remembered an individual teacher who had been central to their experiences. They particularly remembered their “key worker,” a teacher who had visited their home, supported them in the center and made special efforts to connect with the family. A 12-year-old described his key worker as, “one of the most important people in my life at the time.”

Their memories were infused with emotion and incorporated all of their senses—the smell of the wooden blocks, the feel of materials. Specific objects, such as a rocking horse, held prominence in their memories. Seeing it brought back the feeling of rocking on it.

In both groups, students’ spontaneous memories conveyed a sense of being valued, capable and autonomous. They remembered being liked, feeling smart and being taught how to do things. One student described that at nursery school he “learned how to do important things.” For the students in the second group, these memories contrasted with their current experiences. While students in the first group maintained a sense of self-worth and pursued their interests, those in the second group remembered being liked by staff and seen as “smart” in nursery school, but not now. When the interviewer probed one of the students about whether he thought he should have been prepared for later schooling by having his choices limited, he disagreed and elaborated on the guidance he received, explaining, “I got told not to do things, but not told off. There’s a difference.”

The data from this study does not lead to clear, direct findings, but rather provokes further questions about pedagogy and the meaning of children’s early education experiences. Whalley concludes, “Our aim is to develop the powerful video interviews that we have captured as provocations for a wider discussion with the early childhood community. Hopefully, we can help early-years educators and leaders re-engage with their passion for making a difference for children.”

This study inspires further examination of how high quality early childhood programs influence children’s views of themselves as learners. How do these early experiences shape children’s views of themselves as capable learners, valuable individuals and community members? How do they shape children’s views of teachers and the teachers’ role in their learning? How does the environment—the sights, sounds, tastes and smells—shape children’s memories of their first school experiences? These are important questions for the early childhood community, as well as the broader community to reflect upon.
A “two-way conversation between children and designers” is how curator Juliet Kinchin described Century of the Child: Growing by Design 1900-2000, the exhibition she co-organized at New York City’s Museum of Modern Art. The exhibit, which Kinchin discussed in the New York Times’ T Magazine, represented the first major overview of 20th century childhood viewed through the lens of design.

Kinchin was inspired by Swedish reformist and social theorist Ellen Key, whose book, The Century of the Child, published in 1900, envisioned the “universal rights and well-being of children as the defining mission of the century to come.”

A vast archive of over 500 artifacts from around the world, from small objects, toys, games, books and posters to clothing, furniture, health and therapeutic products, was on exhibit. Photos and plans for school architecture, public spaces and playgrounds, both iconic and ordinary, were displayed as a sweeping multi-media timeline. These artifacts reflected the historic influences and design context of each item, representing a spectrum of both individual and collective visions of a child’s material world.

The exhibit, July 29 to Nov. 5, 2012, was arranged chronologically into seven sections: new century; new child, new art; avant-garde playtime; light, air, health; children and the body politic; regeneration; power play; and designing better worlds. Beginning with the rise of the progressive school movement at the turn of the century, the exhibit traversed the influences of avant-garde artists, the impact of two world wars, the advent of modernism and the effects of popular media and consumerism on children’s social, emotional and physical well being.

The conversation between children and designers continues today. Children in the 21st century face many challenges: an education system in transition, fewer opportunities for play in the face of stringent demands for safety and security, an increasingly fragile environment and the ubiquitous influence of digital technology. Designers will need to be responsive to these challenges as they design schools that promote creativity, collaboration and innovation; playgrounds and public spaces that allow for open-ended, unstructured play with access to nature and toys that are not merely meant to entertain, but provide children with the tools, information and resources needed to help them design a world that, as citizens of the future, will one day be theirs.

The last artifact of the exhibit was a timely poster that resonates strongly with education reform scholars and proponents for play: “Play will be to the 21st century what work was to the industrial age—our dominant way of knowing, doing and creating value.”

—Pat Kane, The Play Ethic, 2004

For additional information on the Century of the Child exhibit: http://www.moma.org/interactives/exhibitions/2012/centuryofthechild/
Further reading: The exhibit publication, Century of the Child: Growing by Design 1900-2000 by Juliet Kinchin and Aidan O’Connor, is available through the MoMA or Amazon.com

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Edith Dowley, PhD, founding director of Bing Nursery School, was intimately aware of the impact of design on children’s play and learning. When she intentionally designed the nursery school classrooms and outdoor play yards nearly 50 years ago, she aimed to optimize children’s social interactions as well as create opportunities for active engagement with open-ended materials and nature. Dowley placed the dramatic play area at the center of each classroom, honoring the central role of the family in children’s lives. The dramatic play area, with its child-scaled version of “home” (stove, sink, dress-up clothing, dolls, etc.), gives children the opportunity to take on the known and familiar roles of “family,” especially the parent/child dynamic. This creates a deeper understanding of the world they are most intimately connected to and the one they are hungry to make sense of.

Large windows infuse the classrooms with light and beckon children outdoors to engage with the natural world. Dowley’s vision for the play yards reflected her deep understanding of and respect for a child’s perspective. Kneeling down to see things as a child would, she pointed out to landscape architects where each hill, sand pool and tree should be placed. Perhaps inspired by noted architect Frank Lloyd Wright’s childhood fascination with building blocks, Dowley used unit blocks to make a scaled representation of each classroom’s indoor environment.

Dowley’s design vision is enduring and continues to inspire not only children, but parents, visitors, Bing administrators and teachers as well. The ongoing renovation of each of the Bing play yards has involved extensive planning sessions with playground designers, teachers and builders to design equipment that would not only meet current codes for access and safety but would also encourage children’s physicality through unstructured play.

Design plays an important role in curriculum planning as well. Bing teachers thoughtfully select and arrange materials that invite or provoke children’s engagement. They share innovative uses of materials and equipment common to each classroom, such as rain gutters for water or ball rolling and recycled materials for imaginary play and creative expression. Teachers continue to expand their understanding of the role of design and its influence on young children’s thinking through conferences, exhibits and visits to innovative, progressive schools both nationally and internationally, which are designed to encourage self-directed play.

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The Impact of Design on Children’s Play and Learning: Bing Nursery School, A Design for Play

By Nancy Howe, Head Teacher

August 2013
The Native American Student Advocacy Institute
By Aubrey Gamble, Teacher

"No matter what your circumstances or the problems that you’re facing, without an education it will be harder,” said Joyce Silverthorne, director of the U.S. Office of Indian Education, to attendees of the Native American Student Advocacy Institute. Silverthorne welcomed 300 educators and leaders, serving both rural and urban Alaska Native, Native American and Native Hawaiian youth, to the conference held May 30-31, 2013, in Missoula, Mont. This year’s theme was Educating Native Youth for Success: Many Nations, One Vision.

As a Native American and a teacher, I was inspired by what I learned at the conference, and I am grateful to Adriana Flores, a Bing parent, for sponsoring my attendance.

During the plenary luncheon, Kathleen Little, a senior adviser on student aid policy for the College Board association, led a panel on making college affordable for Native students. One barrier Native Americans face, she noted, is a lack of support for education from their parents. Since many Native students are the first of their family to have the opportunity to go to college, their parents have no experience planning financially for college. New programs aim to remedy this by providing early education about finance and budgeting. Day one concluded with honoring long-time advocate and activist Henrietta Mann, PhD, recipient of the 2013 NASA Lifetime Achievement Award, who said, “Your job as a teacher is not only to educate, but to advocate.” Among her many achievements, she was once named one of the 10 top professors in the nation by Rolling Stone magazine.

At a dinner honoring the conference’s presenters, I spoke with Heather Shotton, PhD, president of the National Indian Education Association, who is working on addressing the problem of school curricula not respecting Native cultures and traditions. The seriousness of this problem was underscored at a conference presentation by Steven Haas and Jerry Lassos, “Respecting Traditional Native American Styles in a Digital World,” which noted that 80 percent of Native American children learn better using visual/spatial instruction strategies. Traditionally, Native Americans use circular versus linear thought processes. Fortunately, multi-disciplinary teaching frameworks are becoming more common. These methods build confidence and self-esteem more successfully.

I left the conference motivated to become more involved in advocacy for education of all children, particularly young children. As early childhood educators, we are in a unique position to support children in their critical first years of life, which set the stage for later educational endeavors.

The Native American Student Advocacy Institute is one of several conferences on diversity organized by the nonprofit College Board association to promote educational excellence and equity for all students. The other conferences focus on Latino and African-American students.

For more information, visit: www.collegeboard.org/diversity-conferences.html.

EVENTS AND INFORMATION

Kindergarten Information Night: A Reminder to Enjoy the Present
By Kate Dwellley, Teacher

Everyone and everything is eternal. That’s how a child of 5 years old generally thinks… They give little thought to the past and the future.—Rick Lloyd, MD

As adults it is impossible to take on this mentality in its entirety, but it’s an important mindset to practice. Reminding parents to live with their children “in the now” was a recurring theme at this year’s Kindergarten Information Night. About 70 parents attended the Dec. 5, 2012 event. A panel of experts spoke and answered questions, hoping to alleviate some of the parents’ common anxieties associated with their child’s transition to kindergarten. Jennifer Winters, director, opened the evening by introducing the speakers and panel members: Rick Lloyd, MD, a pediatrician at Palo Alto Medical Foundation; Mary Bussmann, principal at Walter Hayes Elementary School; Susan Charles, professor at Santa Clara University and former principal at Ohlone Elementary School; Adrienne Brimer, kindergarten teacher at Ohlone Elementary School; and two of Bing’s head teachers, Peckie Peters and Karen Robinette.

Lloyd began by describing common characteristics of the 5-year-old child, highlighting them with anecdotes. These attributes include the desire to please, the view of time as eternal, the decrease of temper tantrums, an increased attention span, an optimistic mindset and greater independence. Lloyd mentioned that children begin to “love” the things made by them and thought up by them. For example, they love their own music, their own incongruous humor and their own fantasies. Also, he suggested, parents may want to introduce chores at this age, specifically chores that may take some time to master, as a way to build their child’s self-esteem. To conclude, Lloyd related an anecdote about his own children as kindergarteners and their challenge in getting dressed for school. He shared: “One of their teachers said, ‘There’s no dress code here. We don’t care what they wear to school. Put them in their clothes the night before.’ One of the best pieces of advice we ever got.”

Bing head teachers Robinette and Peters then spoke of the skills children learn at Bing that contribute to a successful kindergarten experience. Robinette began...
by saying, “If we were only to see it as preparation for kindergarten, we would be missing what is really important about this age and the magic that the 3- and 4-year-olds bring to the table.” She listed many of the skills children acquire at Bing that help the transition into kindergarten, including separation, self-regulation, delay of gratification, performing routines and working in small- and large-group settings. Peters followed, stressing Bing’s emphasis on each child’s cognitive, social, emotional and physical development and affirming that a play-based program like Bing’s offers many opportunities for teachers to support children’s growth.

Bussmann and Brimer followed the Bing staff, describing the social and academic expectations and goals for kindergarteners. Socially, said Bussmann, kindergarteners are expected to understand that school is a safe place and to have problem-solving skills, empathy, self-control and the ability to express themselves. These qualities also continue to be fostered in kindergarten. Academically, kindergarteners are expected to have number sense and letter recognition. Bussmann encouraged participants to visit the U.S. Common Core Standards website for a list of goals kindergarteners are to accomplish by the end of the school year. To Bussmann’s list of expectations, Brimer added toileting, as well as an acceptance of certain “must dos,” or situations in which children are required to do what they are instructed to do without a choice. She also emphasized the need for self-regulation in large-group settings.

In preparation for kindergarten, Bussmann encouraged parents to read to their children, involve them with problem solving at home and most importantly, take time to listen to them. Bussmann suggested that once children begin kindergarten, parents should build relationships with the teachers and other families and take part in the overall school culture. Brimer added the caveat that there are times when parent involvement can be outside of the child’s classroom, in the school’s library or office for example, because the child may have a need for his or her “own” classroom and parent involvement in the classroom may be distracting for the child.

Charles, the former Ohlone principal, concurred with the other panel members, while reassuring all of the parents in the audience about the transition to kindergarten. She reminded parents that the process is more important than the product by using the example of praising a toddler for the color choice in his finger painting. Often, Charles noted, when we praise our own children we bring the praise to a higher level than we would with another child and the praise is focused on the product rather than the creation process. Instead, Charles suggested, parents should enjoy the many moments of the creation process, rather than praising the final product. She added that her most important advice for parents of 5-year-olds is “Enjoy the moment.”

After the panel came a Q&A about kindergarten. Below is a summary.

**What do you think about “redshirting” (holding their child back, especially boys, for a year)?**

Charles said for some children it is necessary, but it is not the norm. She suggested that parents considering this option should ask their child’s preschool teacher and/or pediatrician. Beyond that, Charles encouraged parents to ask themselves what is prompting the concern.

Peters reminded parents to focus on where their child is right now, and not to address potential future issues unless they come up.

**What are the differences between Palo Alto schools?**

Bussmann explained that the Palo Alto School District has 12 elementary schools, of which four are “choice” schools—schools with particular philosophies or programs that are different from a typical public school. The four choice programs are Ohlone Elementary, with a developmental emphasis; Herbert Hoover Elementary, with a structured “back-to-basics” emphasis; Escondido Elementary, with a Spanish immersion program; and Ohlone, with a Mandarin immersion program. Families interested in any of these programs should look at the district’s website for more information and enter into the lottery for a chance at getting into the desired school.

**What are the differences between private and public schools?**

In answering this question, Charles emphasized the fact that almost all schools in the Silicon Valley prepare children very well academically, so the common notion that private schools have better academics than public schools rarely applies in our situation. She encouraged parents to think, “What is important to you?” when choosing an elementary school for their child. This question will help parents to reflect what, in addition to academics, their family considers valuable and may help parents to decide between private and public schools.

**Are twins separated in kindergarten?**

Academic research following the effects on twins in the same classroom versus separate classrooms is mixed, but at Ohlone and Walter Hayes, for the most part, twins are separated. The philosophy is for each twin to be his or her own person.

**What roles do parent volunteers play?**

Both Brimer and Bussmann agreed that classrooms often rely on parent volunteers for small-group times and some extracurricular activities. A meeting at the beginning of the year provides instructions for parent volunteers.

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“This is Malia. That’s Kailea. That is me— I’m the tallest because I’m the oldest.”  
By Leilani C., 4 years 2 months

“Me, mom, dad, those circles are holes in his tummy and that’s Matthew.”  
By Andrew H., 4 years 2 months

My family. By Luis Diego R., 4 years 5 months
“Music gives a soul to the universe, wings to the mind, flight to the imagination and life to everything.” I often find myself agreeing to these words—commonly attributed to Plato, although their true source is unknown. At Bing, we have daily experiences with music through songs at story time, dancing and singing at music time, and songs that originate from children’s play. The ability to appreciate music in all forms comes from experiences that adults offer children, whether it be music in the car during rides home, summer concerts in the park, instruments that are available to experiment with and exposure to the arts at every possible opportunity.

Each year at Bing we support a variety of musical opportunities, from parents bringing their instruments to school for group time to visiting professional musicians and concerts especially designed for young audiences. This year we were fortunate to have a return visit from the Saint Michael Trio chamber music group, which includes Bing parent, Michael Flexer, to play in Center AM for all interested children in the morning classes.

In February, three musicians from the Chinese National Orchestra accompanied by Jindong Cai, Bing alumni parent and Stanford Symphony Orchestra conductor, performed at Bing. The concert at the nursery school provided a preview for a Saturday family concert at the newly opened Bing Concert Hall that featured the orchestra in an open rehearsal as part of Stanford’s Pan-Asian Music Festival. These performances for children and families were the result of a collaborative effort between Cai and Bing Nursery School to provide the community with rich, diverse musical experiences. Cai has been a tremendous supporter of Bing and has organized seven children’s concerts, four of which are part of the Pan-Asian Music Festival, including the 2013 Chinese New Year Concert, Ballet Afsaneh and Mongolian Masters, Gamelan Sekar Jaya and Drum Beats of Asia. Cai’s other productions included Peter and the Wolf, Romeo and Juliet and The Firebird. These opportunities have been musical gifts for our community and have brought world-class musicians to our doorstep to inspire and delight all ages.

In March, we hosted an exceptional string quartet performance for the afternoon classes by the Aeolus Quartet. The quartet was at Stanford to take part in the St. Lawrence String Quartet’s Emerging String Quartet Performance. The SLSQ has generously offered Bing the chance to hear world-class string quartets while they’re on campus participating in a weeklong experience, which includes educational outreach, coaching and performance. The Aeolus Quartet will return to Stanford to participate again in the program and perform at the Bing Concert Hall on April 6, 2014.

In May, the Stanford Band, Ballet Folklorico de Stanford and Mariachi Cardenal de Stanford transported us on yet another musical journey at the Bing Children’s Fair. For weeks afterwards, East PM children replicated and created an entire Stanford Band with instruments made with paper tubes and other recycled materials which they used to march, perform and play out their own musical expressions and ideas.

Our grand musical finale in June was an end-of-year concert on the Center Room lawn featuring Sol y Canto, a Boston-based group led by Rosi and Brian Amador, with local guest artists Daniel Steinberg and Saul Sierra, a Bing alumni parent. It was an evening filled with picnic dinners, dancing children and a feeling that music does indeed unite and inspire us all.
Harvest Moon Auction 2012: Planes, Trains & Automobiles

By Sandra Gedeon, Business Manager

All Aboard! Planes, Trains & Automobiles was the theme of Bing’s 24th annual Harvest Moon Auction, which took place Nov. 17, 2012 at the Stanford Arrillaga Alumni Center. The auction raised an amazing $400,000 for the Bing Scholarship Fund, which provides scholarship assistance to over 20 percent of the children who attend Bing. As in past years, Helen and Peter Bing were strong supporters with a generous gift of $50,000.

The auction co-chairs, Hays Hyre and Brigette Lau, were instrumental in appealing to the community to support the scholarship fund. “Think about the little lives you are impacting. By supporting the auction and the Scholarship Fund, you are potentially changing the lives here, forever!” Hays told an audience at Bing’s Back to School Night in September.

A train mural served as the stage’s backdrop; large planes hung from the ceiling and small planes, trains and automobile cutouts dangled from balloons throughout the room. Adding to the excitement of the event was the presence of ten 49ers cheerleaders, who dressed as flight attendants and passed out cocktails, and of 49ers head coach Jim Harbaugh, who took to the stage during bidding on two 49ers sideline passes and the chance to join him for breakfast or lunch.

The food, catered by Weir & Associates Catering, spanned all regions of the country and included delicious appetizers such as Southern-style grits and shrimp, tiny twice-baked Yukon Gold potatoes, warm roasted BBQ pulled pork with coleslaw and classic Italian bruschetta. CocaCola, Peet’s Coffee & Tea, SusieCakes and Tin Pot Creamery donated the dessert and coffee for the evening. In keeping with the theme, our talented auctioneers, Bing parents Warren Packard and Nate Olmstead, dressed as pilots. They helped bring humor, energy and enthusiasm to the live auction. Bing teacher Todd Erickson was our DJ and played a variety of transportation-themed songs, including selections from Bing’s newest CD, Planes, Trains and Automobiles. The CD, produced and created by Beth Wise, Bing’s assistant director, debuted at the auction.

The live auction raised an incredible $85,000. Items that were auctioned included The Stanford Coaches Box for the Stanford/Cal Big Game 2013, The Incomparable Stanford Band to Play at Your Party, A Palo Alto Fire Department Children’s Party, and A Galapagos Adventure Trip for Two. The ever-popular Fund A Scholarship, a live bidding item with straight cash donations going directly to the Bing Scholarship Fund, raised over $40,000 that evening, with an additional $135,000 raised prior to the night of the auction.

More than 30 events for children, families and adults were also auctioned off. These included The Bing Train Ride Adventure, Intimate South African Dinner, The Bollywood Express, The Prince/Princess Tea with Bing Teachers, The Bing Campouts, The Sports Field Day with Bing Teachers, and Midget Car Racing. Silent auction items included An America’s Cup History Tour, Warriors Courtside Tickets, A Seven Course French/Californian Dinner for Six and many vacation home stays, fine wines and children’s activities and parties. We appreciate the work and donations of parents in each classroom who put together over 45 class baskets with different themes. In total, over 600 items were up for sale.

We would like to express our heartfelt appreciation and thanks to the auction co-chairs, Hays and Brigette, for their tireless work on an amazing auction. We couldn’t have done it without them.

We are also extremely grateful to our parent volunteers—over 200 strong—who worked on over 20 committees. A special thanks to those who donated to and attended our auction. The tremendous dedication of our parents, Bing teachers and staff made the auction what it was—a tremendous success!

We look forward to seeing everyone again at this year’s auction on Saturday, Nov. 9, 2013.
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In honor of all the great teachers & staff at Bing!
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Carolina Abbass: Thanks
Twos TTH PM class
Erin Abod: A big thank you to the teachers of West AM for a wonderful experience
Ali Atlasi
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teachers in East Room  • N adine &
Strick • Sean & H eather Suchter • Lu
M ichael Sm ith • C indy & M ike Soltis: In

2012-2013 Annual Fund Report

Thanks to the contributions of Bing parents, friends and our staff members, we met our goal of $300,000.00 to help support our annual budget. We’re deeply grateful for this generous support. We would like to extend a warm round of thanks to the parent fundraising chairs Jamie and Jeff Barnett, Linda Liu and Gregory Lee, Marnie and Karol Marcin, Emayln and Art Shaw, Alileen Lee and Jason Stinson, Sue and Andy Uchida, Debra and Eric Ver Ploeg, Classroom Ambassadors and their committee members for their efforts and support. In 2012-2013, the participation of our current Bing families reached 57 percent. In 2013-2014, we are striving for 100 percent participation!

The annual fund is an important part of the school budget. The campaign helps us close the gap between tuition and the actual cost of delivering the exemplary programs we offer. We depend on this fund to support staff development, additional assistant teachers in each classroom, parent seminars, special events, outdoor play area renovations and scholarships. No gift is too small or too large. Our goal is for every family to participate in supporting the school. Please join us as we maintain the excellence that makes Bing such a special place for young children. A big thank you to all.

Monetary gifts on the occasion of the 2012 Harvest Moon Auction
These monetary gifts support the Bing Nursery School Scholarship Fund

2012-2013 Annual Fund Report

Head Start Educators Visit Bing

Seventeen administrators from Head Start in Merced County, Calif., including site supervisors, education coordinators and teachers, visited Bing School in August. Among those pictured are Beverly Hartman, head teacher at Bing and director of the Bing Institute (far right), and Beth Wise, the school’s assistant director (back row, second from right).

“lt’s a spider.” By Sam M., 2 years 2 months
Bing Nursery School
CELEBRATING HARVEST MOON'S
25TH ANNUAL AUCTION ON THE FARM

Saturday, November 9, 2013 at 6:30pm
at the Frances C. Arrillaga Alumni Center
326 Galvez Street, Stanford University campus

Celebrate the evening with down-on-the-farm food,
wine and exciting auction items.

All proceeds benefit the Bing Nursery School
Scholarship Fund.

If you would like to donate to this year's auction, please contact
us at harvestmoon@stanford.edu, or (650) 723-4865,
or donate on-line at bingschool.stanford.edu/hm

HERE'S TO A HEE HAW TIME!

Hays Hyre, Stephanie Oshman & Julia Popowitz
2013 Harvest Moon Auction Co-Chairs

Bing Nursery School, 850 Escondido Road
Stanford University, Stanford, CA, 94305