At Bing Nursery School we want children to be well-educated. Parents ask, and rightly so, will my child be prepared for kindergarten following a play-based nursery school experience? The answer is a resounding “yes.” The best way for children to be prepared for the future is to live their present experiences to the fullest. Reprinted below is an article first published in the Bing Times in 1990. This represents a philosophy statement for all of us here at Bing School. You will see this philosophy illustrated throughout this newsletter as our teachers describe the thoughtful projects and learning taking place in the classrooms. Enjoy!

What children should primarily gain from nursery school is an opportunity to play and socialize with a group of their peers under the guidance of trained teachers who can maximize the children’s growth experiences in an emotionally supportive atmosphere. Paying for a child to participate in a group experience is money well spent for parents of preschoolers. The kinds of socialization skills children learn in a professionally designed educational setting, combined with the love and devotion of their parents, contribute to a lifelong security and sense of self-confidence. These skills include knowing how to resolve conflicts in verbal, rather than physical, ways and how to approach another child in a positive, altruistic manner. Children learn a great deal from modeling what adults say and do. Parents may hear phrases their children have learned from their teachers at school such as “No, I’m not finished.” “I need a turn.” “I’m waiting for a turn.” “It’s your turn now.” Shy children who have the benefit of sensitive, observant teachers are helped to develop relationships with other children and to gradually become independent.

Play, the other major aspect of the child’s experience at nursery school, is truly the child’s work. Children are naturally motivated to experiment, to investigate, to learn as they “play.” When the teachers properly set the stage, the children are intellectually engaged in the activities provided. As they participate in a variety of creative activities in art, music and movement, children gain confidence in their own abilities and have an opportunity to practice their developing skills. Many activities can and should be provided at home as well, particularly water play and easel painting, which many children never seem to have enough time with. Although few children learn to read during their preschool years, what they can do and should learn are a variety of pre-reading skills and a love of language, poetry and books.

Problem-solving skills are also important for young children to learn. They are learned in a variety of ways, including experimenting with water in a dramatic play corner, working with puzzles, observing natural phenomena in the science corner and in the garden. Unit blocks are probably the most important play equipment ever designed specifically for young children. All blocks are multiples, or fractions of the basic unit, and as children build with them, they internalize the mathematical concepts inherent in these materials.

Children need an opportunity to work through and to enhance their developing concept-formation abilities. Many nursery school activities provide a basis for this, including dramatic play, most often recognized in the doll or housekeeping...
center where children can dress up and assume different roles. A dollhouse with furniture and figures in miniature is very important as part of this process as well. This type of play allows children an opportunity to work through fears and worries, and to symbolically conquer these emotional hurdles. In addition, in terms of cognitive development, children are able to clarify misconceptions and refine their thinking and knowledge. For example, they may figure out what a firefighter does and what relationships exist among different members of the family.

In summary, children gain a sense of autonomy—a confidence in their own abilities—and a sense of freedom in nursery school. Children gain a feeling of security, of trusting their environment and the adults in it. The nursery school day provides a routine, an anchor that children need, which then allows them to experiment with the flexibility built into the program. As part of their nursery school experience, children learn to separate from their parents for short periods of time, and to enjoy it! Parents enjoy it too! Having a few hours to oneself and knowing that one’s child is having an opportunity to be with other children is a wonderful feeling. This marks the beginning of a new stage in the relationship between parent and child, in which the parent is no longer the only person responsible for the child’s care and education. Parents can also form friendships and share resources with other families. From the program, they learn the importance of having easel painting, unit blocks, dollhouses (for both boys and girls), and all sorts of easily-found materials for creative activities with their children at home. Finally, what children and their families gain from nursery school is a sense of self-esteem from being in an environment which is designed to meet their needs and where the staff admire and respect the beauty of children as they are developing in these early years.
Praising Intelligence:
Costs to Children’s Self-Esteem and Motivation
By Christine VanDeVelde, Writer and Bing Alumni Parent

“You’re such a great artist!”
“You’re so smart!”

Who would ever imagine that praising a child could be bad? After all, we love our children and want them to have high self-esteem. We want them to go out into the world thinking well of themselves, trusting their abilities, succeeding.

But it turns out even well-intended praise for children’s talents and abilities can backfire. In May, developmental and social psychologist Dr. Carol Dweck addressed the Bing community in the 2006 Distinguished Lecture to explain why and how praise can drain a child’s self-esteem and sap motivation.

One of the world’s experts in the study of motivation, Dr. Dweck has spent the last forty years looking at why and how people achieve their potential—or don’t. Her research has, in fact, led to the creation of a new field in educational psychology—achievement goal theory. The results of her work have been used around the world with children, athletes, businessmen and others. And as you will see, the role of praise is integral.

But before the role of praise can be understood, it’s necessary to grasp the fundamental models that underlie Dweck’s work—the fixed mindset and the growth mindset. This is one of Dweck’s most important findings—that there are two different mindsets that children (and adults) can have about their intelligence and abilities.

Some individuals have a fixed mindset. They think their abilities, talents, and intelligence are fixed traits. “They have only a certain amount, and that’s that,” says Dweck. Those with fixed mindsets might believe, for example, that intelligence is determined at birth.

Other individuals have a growth mindset. They think intelligence and abilities are things that can be developed and cultivated throughout life. “People with a growth mindset don’t think everybody’s the same,” cautions Dweck, “but they believe that everyone—through effort, dedication, schooling, experience—can grow.”

How do researchers measure the mindsets of children? By asking them to agree or disagree with statements like the following: “Everyone has a certain amount of intelligence, and they can’t really do much to change it.” Or… “To be honest, people can’t change how intelligent they are.” Children who disagree with statements like these have a growth mindset; those who agree have a fixed mindset.

In study after study, Dweck has found that individuals build an entire psychology of motivation around the mindset they hold. In one such study, Dweck and her researchers set out to measure and define the mindsets of 400 students making the transition to junior high school. (While Dweck’s studies have included preschoolers, most of the research she discussed involved older children. While she noted that these mindsets are found in children as young as three or four, older children have more articulated ideas about intelligence and are starting to show different motivational patterns.)

In this particular study, students with growth mindsets cited learning as the most important goal. They agreed with statements such as, “It’s much more important for me to learn things in my classes than it is to get the best grades.” They cared about grades, but their first priority was learning. “In other words, if you think your intelligence can be developed,” says Dweck, “that’s what you want to do.”

But for students with fixed mindsets, looking smart and being judged smart were the most important goals. They agreed with statements such as, “The main thing I want when I do my schoolwork is to show how good I am at it.”

Notes Dweck, “If you think it’s a fixed trait, you’ve got to have it, and you’ve got to have other people thinking you have it, too.”

Further, Dweck found that children with fixed and growth mindsets have completely different and even opposite beliefs about effort. Individuals with growth mindsets believe effort is one of the most important things in life for achievement. They say the harder you work at something, the better you’ll be at it. They appreciate that no creative genius has contributed anything of note without years of dedication and work.

But individuals with a fixed mindset think effort is negative. They believe that if you have ability, you shouldn’t need effort. And if you need effort, you’re not very smart. They believe that things come easily to people who are true geniuses. “And that’s false,” says Dweck. “It may come a little more easily to geniuses than it does to other people, but it doesn’t come easily.”

Dweck believes this is among the most destructive beliefs a person can hold: that hard work means you’re incapable. And it gets students in a fixed mindset into a trap. They want to look smart, but they think effort makes them look dumb. She characterizes this as a paralyzing conjunction of goals and beliefs.

Another building block in the psychology that develops around a particular mindset is the individual’s reaction to setbacks. As part of the same study, students were given a hypothetical scenario: “Imagine you’re in a new class. You like the class. You like the teacher. You studied a medium amount for the first test, but when you got it back, you got a 54, and that’s an F. How would you feel? What would you think? What would you do?”

Those with a growth mindset had explanations that were effort and strategy-oriented, resilient explanations. They said, “Maybe I didn’t study hard enough, or maybe I didn’t go about studying in the right way.” After all, they were told they only studied a “medium” amount.
But those with the fixed mindset had explanations of resignation. They said, “I guess I wasn’t smart enough.” Or… “I’m just not good at this subject.” “Why would they conclude this after one ‘medium’ session of study for a test?” says Dweck. “Well, remember if you have ability, you shouldn’t need more than medium studying. So from one outcome, they inferred their ability.”

Students were then asked what they would do. Those with a growth mindset said things such as, “I’d work harder in this class from now on.” Or… “I would spend more time studying for tests.” That makes sense: a medium amount of studying didn’t work, so the response is to get help, to study more. But those with a fixed mindset said, “I would spend less time on this subject from now on.” Or… “I would try not to take this subject ever again.” Told they liked the teacher and the subject, the students with fixed mindsets still didn’t change their response. Their motivation was gone.

Further, students with a fixed mindset responded that they would try to cheat on the next test. “It makes sense within that framework,” says Dweck. “If they don’t have ability, if effort is aversive and ineffective, what courses of action are left to these students?” So the fixed mindset is a system in which you have ability or you don’t. If you have ability, you shouldn’t have to work hard. If you don’t have ability, anything goes.

Parents, grandparents, educators—everyone sends messages to children, whether they’re aware of it or not. So what made Dweck think about the message that praising intelligence sends and why did she intuit that it could have drawbacks?

Her studies had shown that students who worried about their intelligence were vulnerable. “Am I going to look smart on this test?” “Should I take this risk?” So if parents or teachers praised children’s intelligence, Dweck hypothesized, didn’t that tell the child that intelligence is the most important thing in the world, that this is what parents and teachers cared about? And would it put such a child in a fixed mindset where they worried about being judged, shied away from challenges, and lost their motivation when things got rough? Dweck wanted to find out.

In a series of studies of both kindergarten-age students and 5th graders, children were given a non-verbal IQ test that consisted of ten moderately challenging but doable problems.

Most of the children performed well on the first ten problems. One third were given intelligence praise. They were told, “Wow, you got eight right; that’s a really good score. You must be smart at this!” Another third were given effort praise: “Wow, you got eight right; that’s a really good score. You must have tried really hard!” The control group was given results praise and told, “Wow, that’s a really good score.” And sure enough, when intelligence alone was praised, it put students in a fixed mindset.

The students were then asked, “What do you want to work on now? I have some easier things here that you could work on, or I have some challenging problems. They’re hard, and you’ll make mistakes, but you’ll learn some important things.” Most of the students who were praised for intelligence chose the easy task. “They’re not fools!” says Dweck. “They wanted to keep on looking smart. They wanted to keep that label.”

But the vast majority of the students praised for their effort wanted the challenging task. They wanted something they could learn from, and they weren’t worried about making mistakes. So right away the study had created one of the hallmarks of a fixed mindset by praising intelligence. “They said, ‘Don’t give me a challenge; give me something I can look smart on,’” says Dweck.

When the students were then given a series of more difficult problems, these results were magnified. Students who had been told they were smart now thought that having to struggle meant they weren’t smart at all. They thought they had low ability at the task. So their confidence in their ability, which is like self-esteem, plummeted. Because again, if success meant they were smart, failure or difficulty meant they were not. “They were being taught to measure themselves by the outcome,” says Dweck. “We’d say, ‘Hey, you did it; you must be smart.’ They said, ‘Hey, I didn’t do it; I must not be smart.’”

But those who had been praised for their effort thought, “I need more effort. These problems are harder. You succeed through effort. I need more of it.” This group remained very engaged with the task. They tried different strategies, and their motivation remained high. At the end, asked to rate how much they enjoyed the problems, those who were praised for their intelligence showed a sharp drop-off in their enjoyment once they hit the hard problems. Those who had been praised for effort showed no drop-off and many of them said that the harder problems were their favorites.

The students were also asked if they would like to take the problems home to practice. Among those who were praised for effort, most were eager to take the problems home, and had responses such as, “Could you write down the name so when they run out my mom can buy me more?” But those who had been praised

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**Things we like to do at Bing School**

- I like to climb. I’m about to get on the climbing structure. By James T., 3 years 9 months
- I like the wagon. Leaves and pine needles in the wagon. By Atticus S., 4 years 4 months
- I like to play with Gwen. By Nash M., 4 years 7 months
- I like to swing. By Dane P., 4 years 7 months

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4 The Bing Times November 2007
for their ability had responses such as, “No thanks, I already have these at home.” As soon as they had to struggle, those who had been praised for their ability lost faith in that ability and any enjoyment in the task.

Over three sets of tests, this same group—those who had been praised for intelligence—also showed a significant decline in their performance. So praising intelligence had made these students less intelligent. Those who had been praised for effort, however, showed a significant increase in their performance on the IQ tests over the trials. (The control group was right in the middle.)

But there was a further finding that was both more distressing and interesting. When asked to write anonymously about their experience, the students were also asked to report the scores that they had earned. Almost 40% of the intelligence-praised children lied, reporting a higher score. “They lied in one direction, and one direction only!” says Dweck. “And what this meant to me was that when children were praised for their intelligence, it became such an important part of who they are, it was so fundamental to their self-esteem that they couldn’t even tell the truth on an anonymous piece of paper to someone they would never meet.”

The results were clear: praising intelligence made students avoid challenge. In the face of difficulty, it made them lose any pleasure in a task they had originally enjoyed. They lost faith in themselves and their performance plummeted. Finally, it led them to lie. “These were children who were randomly assigned to that condition. They were no different from anyone else to begin with,” notes Dweck. “And yet one sentence of intelligence praise put them in the fixed mindset where what they cared most about was looking smart, and where they couldn’t cope with challenges.”

Dweck says they were so surprised by these findings and how dramatic they were that they repeated the study five more times, in many different locations, from the inner city of New York to Iowa. They had the same findings in all studies, including a further praise study conducted at Bing Nursery School.

So which mindset do most people actually hold—a fixed mindset or a growth mindset? According to Dweck, it’s about 40-40. About 40% of children and adults believe intelligence is fixed, and about 40% agree it’s something that can be changed. About 20% in the middle don’t take sides.

As to who is right, well, the subject has been fiercely debated within psychology. But more and more, cognitive psychologists are coming to understand that very important components of intelligence can be developed. Neuroscience is showing a greater plasticity of the brain than was ever imagined, reports Dweck.

So does that mean mindsets can be changed? “The answer to that is yes, they can be changed,” says Dweck, who of course had already set out to prove it. A few years ago, she had begun to wonder whether children could be taught a growth mindset and whether this would enhance their school achievements. In a study with 100 7th graders, she looked at whether teaching students a growth mindset would help their plummeting achievement.

Two random groups were given eight study skills sessions. The growth-mindset group got six sessions of study skills and two sessions on the growth mindset and how to apply it to their schoolwork. These students were given an article to read that said, “You can grow your intelligence. New research shows the brain can be developed like a muscle.” They were taught that the more you exercise your brain, the stronger it gets, and that every time they learned something new their brain was forming new connections, and over time becoming stronger and smarter.

“This riveted the students! They loved learning about the brain,” says Dweck. “They’d never thought about it, how it worked. They never realized that what they had did a direct impact on their brain and the connections it made. And a lot of the students who had no interest in the workshop suddenly participated vigorously.” These students showed a significant rebound in their math grades.

But the students who got only study skills in their eight sessions and no growth-mindset skills continued on their downward plunge. They didn’t have the motivation to put the study skills into practice.

Dweck and her team are now working on developing a computer-based growth-mindset intervention similar to the model used in this study. Called Brainology, it’s currently being tested in 20 New York City schools. In it, the two main characters, Chris and Dahlia, are guided through the program by the Brain Orb. Visiting state-of-the-art brain labs, they are instructed by a mad brain scientist, conduct virtual experiments on brains and watch brain cells create connections simulating what happens when learning takes place—a condition also known as growth.

Dr. Carol Dweck received her bachelor’s degree from Barnard College at Columbia, and her Ph.D. at Yale. Before joining the Stanford faculty in 2004, she taught at the University of Illinois, Harvard, and Columbia. A fellow of the American Academy of Arts & Sciences, and the recipient of many professional honors, she is the author of two recent significant books, Self-Theories summarizes her extensive research on the nature of achievement motivation and the determinants of academic success. Mindset: The New Psychology of Success examines the implications of people’s reactions in the face of difficulties or failures in a variety of important social settings, from sports and school to business and industry.
If children are so exquisitely attuned to what adults value, how can parents better communicate what that is? Professor Dweck had some good advice for Bing parents.

What do you say when a child has a low-effort success?
“Suppose your child comes home and says, ‘I got an A and I didn’t really study,’ or suppose your toddler picks up a skill without really trying? Now, before you heard my talk, you’d probably say, ‘Wow! You’re really good at that!’ But what are we saying there? Are we saying you’re smart when you don’t have to put out effort? You’re smart when you do something quickly? You’re smart when you don’t make any mistakes? Now you can hear that the downside is you’re not smart if you have to work hard, take a long time, or make mistakes. So I would say, ‘Okay, that’s nice, but what did you learn? Did you learn anything new? Let’s do something harder that we can learn from!’ Or if I gave a child a task that he or she could do quickly, I’d say, ‘Whoops! I wasted your time! Would you forgive me? Let’s do something you can learn from.’”

What do you say to a child who dislikes challenges?
“I think as a parent, a teacher or even as a family, we can show that challenges are exciting and fun. Ask ‘What have you done that was hard today?’ Around the dinner table, ask, ‘What did I struggle with today and learn from? What did you struggle with today?’ So instead of being afraid to tackle hard things, hard things could be a badge of honor, and something that we’re proud of ourselves and each other for doing.”

How do you respond to a child who gets frustrated by mistakes?
“A lot of children, very young, start getting frustrated by mistakes, as though the mistake means there’s something wrong with them. One time, in my research, when we gave a hard task to some ten-year-olds, one little boy announced, “You know, mistakes are our friends!” Obviously this child had learned something useful and important, and I think we can all teach that to children. ‘Here’s a mistake: that’s really interesting! Mistakes tell us what we should do next. What do you think we should do next? What should we try next?’ So every time a mistake occurs it becomes something really interesting—a topic of heated discussion—and children will not think it’s the end of the world, as those in a fixed mindset do. They won’t think there’s something wrong with them; they’ll think it’s a natural part of learning.”

Is it harmful to say out of nowhere, “You’re a smart girl,” or “You’re smart,” to a child?
“I don’t think it’s helpful or necessary. Calling attention to process and being pleased about the process a child is engaged in, the concentration they showed, the progress they made, their interest in learning—that’s really helpful. But I hear you. It’s sometimes irresistible to make such comments. And it has popped out of my own mouth more than once. But you know, if you change children’s idea, also, of what smart is—smart is taking on challenges, smart is learning—changing the idea of what that word means is also important.”

What do you think about gifted programs?
“I think that the gifted label should not become an end in itself. The danger is that it could become like intelligence praise, where some students are afraid of losing that label. They may lose their zest for learning; they may want to play it safe, to make sure they stay gifted. So the emphasis must be on challenge and learning within a gifted program.”

What happens when no praise is offered?
“If a child is really passionate about something and doing it on his or her own, why should you insert yourself in that process and make them turn to you for approval or praise? You don’t necessarily want to insert praise where it’s not welcome. Mark Lepper has shown that many expert tutors don’t give a lot of praise. They give feedback, they guide, but they’re not doing a lot of praise. I feel, however, that we’re in such a praise culture. So my message has been more, ‘Let’s praise the right way, not the wrong way.’”

How do you handle criticizing a child?
“In a study with kindergarten-age students, we looked at different forms of criticism and found that when the process, effort, or strategy was critiqued, children were very resilient to failures and setbacks. But when there was a critique of the person, children were less able to cope with setbacks, evaluated themselves more poorly, and were less resilient in their strategies and efforts in the face of their obstacles. Disconnecting the act from the person is extremely important and always the emphasis is on learning and process.”

The bottom line?
“You don’t hand children self-esteem on a silver platter by giving them a compliment. You give children self-esteem by teaching them how to learn, how to love challenges, how to persist in the face of obstacles, how to master difficult things. And then they’re going to go through their day building their self-esteem, accomplishing things because they value them, not because you gave them a global compliment.”

Suggested reading?
Tracing Children’s Thinking Through Observation, Documentation and Reflection

By Adrienne Lomangino, Head Teacher

Bing teachers spend hours each week taking notes on children’s conversations, snapping photos in the classroom, and working with children to make their ideas salient through words, movement, music, crafts and artwork. We call this documentation. Visitors to Bing see some of the results hanging on the classroom walls, and in the booklets teachers assemble to preserve children’s creations and tell their stories. We find that these records enrich children’s experiences at school—as well their parents’ and our own understandings of them.

Bing teachers took a hard look at this practice on Feb. 20, 2007, when early childhood education specialist Lella Gandini, PhD, spent the day with us pondering the connections between teaching, learning, observation, documentation, and reflection. Gandini is a representative of Reggio Children, a liaison organization for the internationally renowned municipal preschools in Reggio Emilia, Italy, which place documentation at the core of their educational philosophy. At Reggio Emilia schools, documentation incorporates use of photographs, video, children’s work, children’s words, and teachers’ interpretations. These teachers consider documentation to be integral to and inseparable from their work with children.

To draw the staff into a deeper appreciation of the meaning and importance of documentation, Gandini began by focusing attention on the Reggio Emilia view of young children and documentation. Gandini introduced a couple of ideas that one might at first react to by thinking “well of course.” The first of these ideas: “Children are competent.” Fully embracing this belief has implications for the paradigm of teaching. The teacher, in this view, is not the omniscient holder of knowledge who tells the children what to do. Rather, the teacher’s role is to support and extend the child’s examination of the world. To optimally support children’s efforts to elaborate and extend their thinking and exploration, teachers need insights into the child’s perspective of the situation. Through observing children and interacting with them, teachers can gain insights that will enable them to assist children in cultivating their thinking. By taking records of children’s activity, teachers have traces to examine and reflect upon. According to Gandini, observation, documentation, and interpretation are essential practices for successfully teaching in accordance with the belief that “children are competent.”

Another concept essential to the Reggio philosophy Gandini proposed for consideration is: “To be a teacher is to be with children.” For teachers, attentively listening, observing, recording, and reflecting transforms what “to be with children” means. The teacher is not imparting knowledge, hoping that the children are somehow absorbing it. Rather, Gandini provided images of “being with children” through attentive listening, observing, recording, reflecting, and offering.

In the first example of documentation Gandini presented a series of pictures referred to as “the story of Laura.” In the first photo, an infant, Laura, examines a picture of a wrist watch in a catalog as a teacher observes intently. Laura then points to the picture and looks at the teacher. Noting the child’s interest, the teacher then points to her own watch and raises it up to Laura’s ear. Laura’s eyes are wide and her mouth slightly open as she leans toward the watch. In the next image, Laura is putting her ear to the catalog page. The series of photos provide a trace of a child-teacher interaction that is rich for reflection. They reveal this young child making a hypothesis about what a watch does, “do all watches make a sound?” and with support from an attentive adult, making a connection between the real world and the two-dimensional photographic representation.

In another photo sequence, referred to as “the closed spaceship,” two preschool-age children, Ivano and Francesco, are drawing. Ivano challenges Francesco about the meaning of his drawing, which could be described as a scribble. Rather than intervening, the teacher remains nearby, attending to their unfolding interaction. Francesco asserts that it is a spaceship that is closed. Ivano then proceeds to draw on Francesco’s paper, above the “spaceship.” Ivano labels his addition to the drawing as an astronaut, thereby validating Francesco’s assertion that his drawing is a spaceship. Francesco smiles. This brief story, which could so easily be overlooked in the stream of classroom activity, reveals the boys’ responsive, validating exchange.

These examples reveal the value of documentation for reflecting on children’s thinking and development. Reflections on such documentation provide insights into not only the thinking processes of individual children, but also the development of children more generally. Seeing Laura’s expressions and responses, for example, one cannot help reconsidering one’s conceptions of infants’ cognitive capacities.

In her examples of documentation from Reggio Emilia, Gandini illustrated the teacher’s intent stance, waiting to discover how the child will respond to an object of interest. Listening, as Gandini points out, is more complex than hearing.
The teacher learns from the child, then tries to give the child more grist to develop his or her awareness and understanding. Attending closely to the child’s activity leads the teacher to consider, “What can I do next to support this child?”

These are not extraordinary situations with special materials, but rather everyday moments—an infant pointing to the picture of a watch in a catalog, and children examining each others’ drawings. Through careful observation and documentation, the attentive teacher can recognize many learning opportunities within children’s everyday activities. As teachers plan activities and select materials, they often anticipate learning opportunities. But through listening and observation they will also notice the unexpected learning opportunities that arise as children use materials in unforeseen ways.

In the afternoon, Bing staff members had the opportunity to discuss their own observation, documentation, and interpretation practices in small groups. Then the staff reconvened, sharing reflections, making suggestions, and asking questions. After the staff collectively generated a listing of a couple dozen reflections, and the room hummed with the flurry of ideas, Gandini re-centered the group by drawing attention back to children with some profound musings from Loris Malaguzzi, founder of Reggio Emilia’s municipal preschool system and its director for more than 30 years. She noted, “Teachers that use documentation see that children are moving forward,” and through such experiences gain an energizing sense of wonder and surprise.

Lera Boroditsky: Language Influencing Thought
By Jamie Leach, Assistant Teacher

Lera Boroditsky believes the language children speak shapes how they think. An assistant professor in Stanford’s psychology department, she is one of the first scholars to back up this commonly held belief. Her work has taken her around the world, including to our own Bing Nursery School.

Bing teachers had the opportunity to hear from Boroditsky, PhD, at the spring staff development day. She described her research on the influence of language on thought as well as how the emergence of this influence varies from language to language.

Her research has uncovered many instances of language molding thought. For example, in a study comparing native Indonesian speakers and native English speakers, Boroditsky found that Indonesian speakers were much less likely to use time markers when describing actions than English speakers. In Indonesian, you might say the equivalent of “a girl kick a ball.” But not in English. Instead you would say that she is kicking, is about to kick, or has kicked. As a result, speaking English seems to lead a person to be more attuned to when an action takes place.

Boroditsky has conducted similar studies around the world, investigating a variety of languages. She presented a subset of this work to the Bing staff, including a study with young children in aboriginal Australia showing that speakers of one aboriginal dialect perceive time as moving east to west, rather than left to right as do English speakers. Boroditsky’s presentation inspired the Bing staff to attend to these interesting cross-linguistic differences when planning curriculum and supporting children’s growth in the classroom.

RESEARCH

Researcher in Profile: Allison Master
By Chia-wa Yeh, Head Teacher and Research Coordinator

Many children at Bing Nursery School have met Allison Master, a 3rd year graduate student in psychology at Stanford University. Gentle and attentive, Master and her research assistants have spent hours in the classrooms getting to know the children at Bing and inviting children to participate in her studies. Typically researchers spend a few mornings or afternoons each week in the classrooms. They often partake in activities such as reading books to children, supporting children’s work and play, or passing plates of fruit around the table at snack time.

Master grew up in a log cabin up a dirt road in the mountains, about 15 minutes away from the city of Asheville in western North Carolina. Master traces her interest in working with young children to her family. Her mother has been a preschool teacher for many years and now works one-on-one with children with special needs. In fact, Master’s mother was her preschool teacher! While in high school, Master spent a lot of time volunteering in her mother’s class. Master’s older sister, who works for a union for Broadway actors in New York City, had previously taught children with autism for two years.

Master is passionate about reading, a trait evident in an anecdote she shared. Her father, a lawyer and an avid Yankees fan, once took Master and her sister to a Yankees game. Both girls had a great time as they spent the entire time on the bleachers, fully immersed in their books.

Observational drawing of solanum jasminoides (potato vine), grown in East room yard along the fence bordering Center room yard. By Riley G., 4 years 8 months
Her father eventually resigned himself to the fact that his children much prefer books to baseball.

Master attended Yale University and majored in psychology with a minor in philosophy. While at Yale, Master continued her work with young children. For her work-study program, Master worked for two years with at-risk children on a one-on-one basis and taught at a preschool attached to the Connecticut Children’s Museum in her senior year.

After graduation, Master worked as a research assistant for two years for professor Geoffrey Cohen, PhD, at Yale, now at University of Colorado. She conducted surveys with minority middle school students for a project that aimed to provide intervention to reduce the minority achievement gap in middle school. This work shaped her decision to pursue a doctorate in psychology.

At Stanford, Master studies under the guidance of renowned psychologist Carol Dweck, PhD. (For more information on Dweck’s work, see page 3.) Her research interests are motivation and the development of motivation and how it relates to resilience and academic achievement in children. In the long run, Master would like to conduct applied research with older children.

Master is interested in finding out how beliefs children form now might affect their development later on. Why do some children form beliefs that intelligence or goodness and badness are fixed entities and that making a mistake means one’s bad? Furthermore, she is interested in studying whether these fixed beliefs affect children’s motivation. For example, are children with these views more likely to behave as if helpless after making a mistake? And are they less likely to be motivated to take on challenges? Master and Dweck are investigating where these beliefs come from and how to help children be less fearful of making mistakes. They are also exploring whether listening to storybooks with different messages might change how children respond to challenges and lead them to see mistakes as part of the learning process.

The two researchers are also looking at whether a child’s temperament affects beliefs. For example, might shy children be more likely to develop fixed beliefs and become discouraged when facing setbacks, and as a result avoid taking on challenges? Preliminary findings suggest that very shy children also shy away from too much challenge, for example, difficult puzzles, as do children who hold certain beliefs about goodness and badness.

Why is this research important to Master? “Because it captures my interest in helping children to achieve their potential,” she said.

In addition to her work on how children form their beliefs, Master is also working with Dweck and psychology professor Ellen Markman, PhD, on a study on the effects of placing concepts along a continuum versus placing them in various distinct categories.

In this study, researchers sit with children in the research game room and show them simple line drawings of smiling and sad faces in progression from a very big smile, to smaller smiles, to mildly sad, to very sad. They describe the expressions to the children. While talking with some children, the researchers describe the faces as either happy or sad—no in between. With other children, they describe the series of images as a continuum: really happy, a little happy, less happy, a little sad, more sad, really sad. The researchers want to find out what, if any, impact this has. Among their questions: Would children who hear descriptions that fall into discrete categories tend to view these faces in the same way—as either happy/nice or sad/mean? Would their counterparts who hear descriptions that reflect the presence of a continuum tend to be less likely to view these faces in an “either/or” fashion? For example, will those who’ve heard researchers describe concepts along a continuum consider a small smile as more similar to a small sad face than to a really big smile? Researchers then ask follow-up questions regarding how these people, as represented by the faces, might act in different situations. The results so far suggest that the way children think about items does affect their descriptions and judgments. Next, Dweck, Markman, and Master are interested to see how this affects children’s judgments about social categories such as nice versus mean and good versus bad.

Participating at Bing in the past two years has meant a great deal to Master, she said. Aside from being able to work on her studies, Master enjoys taking a break from graduate school to ride on rocket ships built with blocks and eat dinosaur pancakes made out of play-dough. “I love that Bing values learning in all its forms. It’s not just about children learning, but also about teachers and college students and researchers together learning more about how children learn.”
Fostering Literacy

Literacy is more than reading. It encompasses children’s ability to speak, listen, view, and think. At a parent seminar on April 2, more than 70 Bing parents heard about literacy and how they can encourage it in children in a developmentally appropriate way.

The presenters, teachers Bev Hartman, Adrienne Lomangino, and Karen Robinette explained that through play, children can explore all of these literacy skills while on the path to becoming readers. Children at Bing engage in a range of emergent literacy activities, and through this practice they foster the necessary skills to become good readers, writers and thinkers.

The presenters quoted early childhood education scholar Elizabeth Jones to clarify the importance of play for literacy: “For school success in America today, early literacy has become the primary criterion. Often it is taught by rote. But standardized instruction ignores each child’s relationship-based, meaningful experiences with language and literacy. In a literate society children pretend to be readers and writers just as they pretend to be shoppers and drivers of cars; they are spontaneously practicing adult roles to learn about them in ever increasing detail. Children playing together frequently correct each other, jointly shaping their understandings.”

Bing teachers originally delivered the presentation at last year’s parent seminar series. They also gave the talk at the annual conference for the California Association for the Education of Young Children, which took place in San Jose this March. It was developed by this year’s parent seminar presenters as well as teachers Sue Gore, Meghan Olsen, and Sarah Wright.

—Amy Blasberg, Assistant Teacher

How to Talk with Children

Children have an innate drive to explore, which pushes them to communicate, explained Bing teachers at a parent seminar on May 16. More than 100 parents attended the talk. Children learn quickly that communication is an essential tool for their investigations, and they model their behavior on that of their parents and the adults in their world, who use various styles of communication.

Many parents and children communicate with each other on a daily basis, using the basic form of conversation—the give and take of listening and responding—teacher Emma O’Hanlon said. These moments are precious because children are learning the meaning of language and how they can use it to express basic needs and solve problems.

Teachers Peckie Peters and Todd Erikson discussed some of the basic elements of communication—tone, language, and perspective—to help parents gain a better understanding of effective communication. Children communicate not only with words but with gestures and movement, for example, a child’s arms bursting straight to the sky to proclaim an achievement, such as, “I did it!”

Teacher Quan Ho walked the group through the steps of addressing a typical problem-solving scenario for children at Bing: learning to share equipment. The steps: 1) Identify problem 2) Brainstorm solutions 3) Come to mutual agreement, and 4) Implement plan. Children are active in their daily life and when situations become difficult they draw upon their strategies to help them move pass barriers. Social problem solving requires practice. Children will benefit from the assistance of adults to guide them through the stages. With each encounter, children gain greater mastery of the skills and internalize their experiences, which prepare them to succeed in life.

—Quan Ho, Teacher
The Musical Story—The Power of Music to Aid Early Literacy

By Simon Firth, Writer and Bing Parent

Regular visitors to Bing’s classrooms will know how music permeates every child’s experience of the school—from surprise encounters with musicians wandering through the play yards, to post-snack dance parties, to whole mornings spent making elaborate sets and props and then acting out a favorite song. All are fun activities, of course, and all enrich children’s lives in the same way that music adds to the fullness of our own.

But more than a simple hope of enrichment informs the choices Bing teachers make when planning musical experiences for their students. They back every musical encounter with careful thought about how music aids a young child’s social, emotional, and intellectual development.

On May 9, head teacher and music specialist Beth Wise and Two’s and West PM teacher Michelle Forrest shared some of that thinking with more than 60 Bing parents as part of the 2007 Bing Parent seminar series, in a talk titled “The Musical Story.” Some highlights:

Exposure: Just the starting point

Any effective music program for young children needs to do more than simply expose them to music. Bing’s teachers and many parents with musical skill bring their own music-making into the class, but the school’s children also need to be musicians themselves.

“We want children to experience real-live music and work with real instruments,” explained Forrest as she introduced some of the instruments—shakers, drums, bells, xylophones, maracas, and rhythm sticks—that children regularly play in class.

Equally important is the attention teachers pay to every child’s very different relationship with music.

Not every child, for example, will want to join in every musical activity, said Forrest. “But even if a child isn’t singing,” she said, “they may still be connecting in a different way.” During a song about ducks disappearing one by one, perhaps, a silent child may well be concentrating on counting, and thus develop an important skill.

Knowing every child well helps immeasurably in suggesting how music might best reach each of them, said Wise. “I have found throughout my teaching that the key is really developing a relationship,” she recalled. “The first thing I need to know is ‘Who are you? What are you thinking today? What do you want to tell me about yourself?’ And through that really close development of a relationship, I can find out what motivates you musically and what motivates you in other ways.”

Literacy booster

The enjoyment that most children naturally find in music makes it an especially valuable tool when it comes to developing early literacy. No child can be literate without first being able to understand and reproduce speech, for example, and music has a key role to play in developing those language skills.

“In music,” said Forrest, “children are paying attention to the auditory sounds and signals they hear. That is exactly what they’ll have to do when they’re paying attention to speech and listening in the language process.”

Experiencing songs that vary in pitch, tempo, and beat and that feature word games such as rhymes helps children discriminate between words and sounds. Singing a song that rhymes “hat” with “sat,” say, helps you understand that there are differences between the words, and what those differences might be.

Just the ability to keep a basic beat is important, Wise explained. “We try to do a lot with rhythm sticks or drums,” she said, “just to really have that one-to-one correspondence of word to sound. When you hear a child beginning to read, ‘The. Cat. Went. To. The. Store,’” there’s sort of a cadence to it. And it really helps if you’re playing an instrument and you’re learning to keep that beat.”

A single song can offer help to children across the school’s developmental age range. Take the pre-school classic BINGO. “As children develop linguistically,” Wise noted, “they begin to separate the letters in the song. You’ll see children at first say, “B-I-N-G-O.” And then as they’re a little older, it’s B. I. N. G. O. And then as they’re even older they’re actually nodding their head and they’re being able to separate the letters, which shows their ability and their awareness that the letters are separate.”

The simple act of storytelling in a song helps ease a child into the act of reading, said Forrest. “When they’re going to be reading,” she explained, “children are going to incorporate sound and the visual text. And so this is a way to parallel that process and to start it earlier before they’re able to read.”

Teachers can even incorporate literacy directly into musical games, suggested Forrest. When singing A Tisket A Tasket, for example, she noted that Bing teachers...
often encourage children to actually write a letter, put it in a basket, carry it around and drop it off for someone else.

**Memory aid**
Any parent who’s tried to help a child learn their ABCs knows that setting them to music makes the sequence instantly easier to learn, remember, and recall. The same principle applies to literacy more broadly, Wise and Forrest explained. Essential skills for being able to read and write come much easier when put in a musical context.

Take the concept of sequencing, something children need to comprehend in order to understand a story, or even the idea that a text flows in a logical sequence (in English, from top to bottom and left to right). Songs with fun choruses and simple verses that move the action forward teach sequencing very effectively, Wise suggested.

She shared a video in which she led a group of children through a song based on the story of The Three Little Pigs. The children sang about each pig making its house, playing instruments to make the sounds of a hammer, saw and cement mixer, actively commenting and contributing ideas for it as it went along.

In particular, Wise pointed out, the video showed the children “relating the story in a logical sequence and identifying the characters. They’re beginning to understand the text as well as singing it.”

The song also illustrated how song can help children practice phonemes, like the “ssss” sound of a snake coming or the “whoosh” of the wind, and how it can encourage them to use their imaginations to say, for instance, “Look up. We don’t have a roof!” and then pretend to build it.

Using song in this way, added Wise, “makes many children want to participate because it has elements of excitement, elements of dramatic play as well as musical components. It’s very motivating.”

**Why fun matters**
It’s important that none of this seem like work to children, though. “We strive to bring out the joy of this experience,” she said. “You cannot overstate how important it is for them to just enjoy this and be free.”

Forrest quoted Bing teacher Kittie Pecka who likes to say that “music can be a very deeply emotional experience,” and then linked that notion to recent studies in developmental psychology that show how deep emotional experiences aide both memory and learning processes. Just to allow children to feel different emotions and go different places through songs, noted Forrest, is to aid in brain development and cognitive functioning.

**The “magical road” to literacy**
Forrest shared a second video where children acted out a song that she wrote herself based on Eric Carle’s classic picture book, *The Tiny Seed*. In preparation for the re-enactment, students worked for a week painting the set—four landscapes on which the seed falls during the song. The children took “seeds” they made with scarves and had them fall on the first three inhospitable landscapes—a desert, a mountain, and ocean—until the seed found a garden where it grew into a flower.

All worked hard to create the world of the song and even extended their play to depict other hostile environments for the seed (concrete, for example) that weren’t in the original story. The group collaboration allowed the children to work on things that interested them most, within a context that was supportive of literacy, Forrest recalled.

That concept of letting children make developmental leaps on their own is key, she said. “We think of their learning this way as a journey down a magical road,” said Forrest. Instead of pushing the children via formal instruction, “we’re taking them somewhere where they push each other to think about the content of the material they’re working with,” she said. In the process, they’re taking themselves to a higher level of cognition.” It’s an idea put into formal terms by psychologist Lev Vygotsky in his theoretical conception of a child’s “zone of proximal development.”

**A role for parents**
In response to questions after the talk, both teachers agreed there’s much that parents can do to foster both development and early literacy in their young children.

Parents, after all, know their children better than anyone and are therefore uniquely able to offer them engaging songs and stories.

If nothing else, suggested Wise, “read to them, sing to them, use simple instruments at home to tap out that beat—and when meshed with their having the chance to play and to be able to really develop who they are as individuals, it will give them a great skill set for entering a more formal educational system.”

**It works**
Forrest and Wise first presented their talk in April, to a packed house at the annual gathering of the California Association for the Education of Young Children.

In preparing for that presentation, both teachers researched how well music at Bing met curricular standards for both music and literacy in pre-kindergarten schooling. To their delight, the level of understanding reached by Bing’s students in music met not only the National Association for Music Education music education standards for Pre-K music, but also many California kindergarten English language arts content standards as well.

Among the California state standards for kindergarten literacy, for example, are the expectations that students:

- Identify and produce rhyming words in response to an oral prompt
- Track auditorily each word in a sentence and each syllable in a word
- Follow words from left to right and from top to bottom on the printed page
- Make predictions about story content
- Retell familiar stories
- Relate an experience or creative story in a logical sequence
- Identify characters, settings, and important events

It was especially exciting to discover that Bing was meeting these goals through a play-based program, recalled Wise.

That’s particularly encouraging, both teachers said, in a time when nursery schools are under great pressure to introduce more rote learning to prepare children for kindergarten programs that expect children to achieve at what used to be a first grade level.

“What we wanted other educators to see,” said Wise, “was that if you’re thoughtful and if you plan with intent and integrity, you can weave the skills that children need into their lives through a play-based environment that respects children and respects the depth of their thought, the development of their relationships and who they are as individuals.”
Trees as a Topic: From Science to Socio-Dramatic Play

By Beverley Hartman, Head Teacher

Inspired by Bing’s rich natural setting, the teachers of East AM focused on trees for an in-depth study last fall. As we began creating activities and materials, the opportunities for teaching science and math became quickly evident. What was less clear was how children would come to use trees as a topic for their socio-dramatic play.

Tracing the evolution of this in-depth study demonstrates how our team guided children to tie classroom learning to the world around them. It also reveals the surprises children’s creative learning processes so often have in store for us.

To launch the project, we set up a discovery table hosting forest-related materials. This was designed to encourage the children to explore and to help us assess their interest. Together, we identified types of trees. The children drew them and in so doing practiced the first technique in the project’s science curriculum—observational drawing. The team created a board and matching games with the goal to identify trees, compare tree components, and pretend to plant new trees. We went on to create a chart that linked trees in a different modality—a family, type of play enabled children to integrate their social, emotional, physical, and cognitive development. They were investigating what they had learned about trees in a different modality—a family, which is a structure they all know and appreciate.

The tree family signaled children’s emerging ideas for dramatic play. This type of play enabled children to integrate their social, emotional, physical, and cognitive development. They were investigating what they had learned about trees in a different modality—a family, which is a structure they all know and appreciate.

More creative twists were to come. The catalyst for the next phase was introducing a Burl Ives song called Lollipop Tree at story time and then at music. The concept migrates to the sand area and soon children built their own lollipop tree. Expanding that idea, the children created a maple syrup tree, which in the world of the play scenario began to overproduce. It flooded the sand area, and the children quickly built a houseboat, gathered supplies, and climbed aboard. Using shovels as oars, they stroked together while chanting, “Row! Row! Row!” (For a full account of the development of the play scenario, see page 23.) Another scenario centered on a “tree dragon.” The children built sand castles for the dragon and communicated with him by writing messages to their new friend. The topic was no longer teacher driven but rather was owned by the children.

The evolution of a topic is not always visible nor does it always follow a linear path. Teachers establish trusting relationships and a climate safe for learning. They observe carefully throughout the process and make adjustments as needed to meet the children’s interests and responses. Teachers provide materials and resources in the environment, enough time and repeated opportunities, and they scaffold the learning activities to support children as they gain skill and knowledge. For children to engage and stay motivated, teachers must be sensitive to what helps a topic be significant to young children in the context of their development and culture.

Trees as a topic had universal appeal to the children and teachers in East Room. The teachers, who are nature enthusiasts, had a genuine interest in providing educational opportunities built on the topic. Children gained in their knowledge and understanding of the science of trees. Meaning deepened as the children took charge of “playing” trees. Over time, both groups, teachers and children, truly co-constructed a curriculum.

Photo not available online.
Making Sense of Our Senses
By Adrienne Lomangino, Head Teacher

When the children of the East PM classroom returned after winter break, many took an immediate interest in some new objects on the class discovery table: six small squeeze bottles, each holding a cotton ball laden with scented oil or extract. With each squeeze a puff of scent spurted out of the bottle, either eucalyptus, lavender, lemon, mint, rose, or vanilla. The children's fascination with these scents inspired us to encourage them to explore all five senses.

Children are naturally inclined to learn about the world through their senses. Yet within their daily lives, children soak up visual media and other virtual experiences, which flash by on televisions and computers. So during their time at Bing, we sought to provide children opportunities to, in a sense, slow down and smell the flowers—to attend to what they could smell, hear, see, touch, and taste.

Drawing children’s attention to the different senses supports their developing awareness of themselves and the world around them. So as they explored how things smelled, looked, sounded, felt, and tasted, the teachers encouraged them to make discriminations and attend to similarities and differences in their sensory experiences. Some highlights of our activities:

Noting children’s interest in smells, we kicked off our exploration by planting a “smelling” garden. Children first cleared out the straggling plants and loosened the soil. We then planted a variety of fragrant flora: hyacinth, jasmine, lavender, oregano, and peppermint. (Four-year-old Call sampled the array of scented plants to create a “perfume.”) At story time we read *Zin! Zin! Zin! A Violin*—which became a theme for our week. As a particular highlight, Matt incorporated sound clips to his reading of *Zin! Zin! Zin! A Violin* at story time. Then, instead of a sound clip of the violin, Max played the violin for the group. At the end of the week, the story time included several visiting musicians, and student-created instruments.

As engaging as these and other sensory activities were, the most exciting moments for me arose spontaneously in children’s play. These brief moments in the hustle of everyday classroom activity revealed children’s attention to extending their sensory experiences. The following examples illustrate how children interpreted and responded to classroom experiences in ways that reflected sensitivity to hearing and creating sounds.

- Jackson and I sat on the grass, watching to see if a piece of Mylar would scare away birds. We heard a bird call, but could not see the bird.
- We followed the call, noting when it was sounding louder, until we determined in which tree the bird must be sitting.

- While making collages with different textured materials, Erik rubbed together two pieces of sand paper, noting the sound it made. Rubbing together two pieces of burlap, I asked if they made a sound. Erik and Sydney reported that they didn’t. I then put the pieces close to Erik’s ear and rubbed them together. His eyes widened as he smiled and said he could hear it. They were surprised to find out that they could hear cotton balls rubbing too, if they listened closely.
- Allison approached the collage materials and bounced several pieces of crumpled aluminum foil in her hand. “You could make an instrument with these,” she proposed and took the pieces to the nearby self-help table. There she made a cylindrical paper holder for her foil shaker.
- Carlie also used self-help materials to make an instrument. She made a slide trombone with a cardboard tube, paper cylinder, milk bottle cap, and string.
- During the week that the class read *Zin! Zin! Zin! A Violin* at story time, Erik created a “cello-guitar” on the patio using a cylinder, milk bottle cap, and string. During the week that the class read *Zin! Zin! Zin! A Violin* at story time, Erik created a “cello-guitar” on the patio using a cylinder, milk bottle cap, and string.

Together we worked to open children’s senses to the world around us. It was heartening to see the children take the concepts we introduced into a creative realm of possibilities beyond what we had imagined.
Zin! Zin! Zin! A Violin: A Weeklong Aural Exploration
By Matt Linden, Head Teacher

The East Room PM classroom’s exploration of the five senses this year included extra treats for the ears. As the project drew to a close, we spent a week learning about music and reveling in the pleasures of performing and listening. To highlight music and sound, I read Zin! Zin! Zin! A Violin at storytime. This beautifully woven lyrical story by Lloyd Moss introduces children to 10 different orchestral instruments through playful language and poetic literary devices. Marjorie Priceman’s delightful illustrations mirror the liveliness of the text and earned the book a Caldecott Honor in 1995. It brings the world of music to the child in an enchanting way.

To extend the story beyond the book, I wanted to bring the sounds of the instruments (if not the instruments themselves) to class. After some research, I found the perfect collection of sound clips at the Dallas Symphony Orchestra’s webpage for children (www.dsokids.com). The site offers clips of each instrument playing Twinkle, Twinkle Little Star as well as other solo pieces. I downloaded these clips and organized them according to the instruments’ appearances in the book.

At storytime on Monday and Tuesday, I read the story to the children, emphasizing the rhyme, alliteration, and onomatopoeia. As an extension of the book, I brought in a violin for the children to play and draw. We discussed violin vocabulary, experimented with playing while placing fingers on the neck, and gave labels to the sounds we heard (“a plane taking off,” “a creaky door,” even “blubber”). I was aware that one child in our class, Max, was taking Suzuki violin lessons. I invited him to play for the class at storytime. Knowing that we have an extremely musical teaching staff at Bing, I had invited teachers Amy Blasberg and Minjae Bae to bring their instruments to our storytime. Amy, who plays for the Stanford band, brought her trombone and a trumpet, and Minjae brought her flute. When I told Max they were going to join us at storytime, Max asserted that he wanted to play his violin again. I was elated at the idea of Max playing the same melody as the teacher. Next I signed children up to present to play my banjo while Max played his violin. Our plans changed slightly when Maya S. approached us with a proposition. “Max can play Twinkle, Twinkle on his violin, you can play it on your banjo, and I know the words, so I can sing it. We can be a trio,” I was delighted with this idea and pleased that Maya had incorporated terminology from the book (“trip”). Max was thrilled. At storytime, we performed Twinkle, Twinkle together and once again received applause and praise from the East Room community.

Friday storytime typically involves the culminating event of the week’s story. Knowing that we have an extremely musical teaching staff at Bing, I had invited teachers Amy Blasberg and Minjae Bae to bring their instruments to our storytime. Amy, who plays for the Stanford band, brought her trombone and a trumpet, and Minjae brought her flute. When I told Max they were going to join us at storytime, Max asserted that he wanted to play his violin again. I was elated at the idea of Max playing the same melody as the teachers. Next I signed children up to participate in our storytime orchestra and invited them to make a drawing of the instrument they would be representing.

As I read the story, I paused after each page to allow for the musical interlude. Since the story begins with the brass section, Amy played Twinkle, Twinkle first on the trombone and then on the trumpet. Erik had created a “cello-guitar” at the woodworking table that day, and when it was his turn to play Twinkle, Twinkle he strummed his rubber bands in perfect cadence with the rhythm of the song. His joy at playing his instrument could only be described by the smile that spread across his face in reaction to the applause he received. Max was next and once again performed to a captivated audience. Minjae nodded in appreciation of her fellow musician and played the same melody on her flute—“that slender, silver, sliver,” as described in the story. Beau wrapped up the individual performances by strumming a few stirring chords on the zither (representing the harp), and I played a clip of Vivaldi’s Four Seasons as we concluded the book.

Zin! Zin! Zin! A Violin is an excellent book for building vocabulary, contextual knowledge of instruments, and phonological awareness through rhyming and specific letter and sound blends. I was able to enhance this story by making use of technology in the classroom and the musical resources in our community. The result was an engaging and charming series of storytimes that built children’s self-confidence, drew them closer to members of the orchestra, and created musical connections between our classroom, our school, and the outside world.
A Story to Tell: Story Writing, Storytelling, and Story Plays

By Nancy Howe, Head Teacher

“Everyone has a story to tell, a dream to share with the world, and a right to tell their own story in their own way.”
—Jacqueline Woodson, children’s book author

For the children in the Center PM classroom, this year was full of story writing, storytelling, and acting out stories—the results of a yearlong literacy-based project. Its origins were rooted in last summer’s passionate interest in writing humorous stories that the children fondly called the “Goo Goo Gaa Gaa” books. As the teachers transcribed the stories and later read them aloud at story time, the children recognized first-hand the power of their own words. They supported one another with respect and enthusiasm as they listened to each new story. When school started in the fall, the children were excited to resume writing.

As the children’s competence in story writing grew, teachers encouraged the exploration of other literary genres, as well as different ways to tell a story. A child who had taken home the classroom rabbits for the winter break wrote a manual on rabbit care. Some stories were very simple and developed from explanations of their artwork. Sometimes a familiar story became the inspiration for retelling a story in a child’s own words. Children also devised inventive formats through which to tell their tales. One child incorporated a window and a turning wheel into her book, so that each time a sentence was read, a different picture peeked through the window. By simply folding paper back and forth like an accordion, another child showed her friends how to make a book that could stand up.

Experiential stories drew upon events that occurred outside of school—a family trip, a sibling’s first tooth, shopping for new shoes—and led to the creation of an ongoing classroom newspaper where children could share news from home. Family outings often acted as catalysts for stories, weaving fact with products of the children’s rich imaginations.

**Picking Up Shells**

by Hadley

*Galloping horses at the beach and they were eating sand. And the sand was blowing. It was chilly and the sky was blue. This is a sea monster jellyfish I found in a tide pool in Half Moon Bay, California. This is an octopus. This is a particle. This is a hula bird flying, then standing on one foot.*

One of the children introduced the class to the idea of a comic strip as a way to tell a story. Another turned his story into a song.

**A Story Song**

by Ameer

*ABC falling on the grass. Climbing up the tree like a monkey!*  

Young children are inherently attracted to the rhythms and metaphors of poetry, and some children were drawn to producing their own poems.

**Pinecone the Climber**

by Lindsay

*Where do pinecones belong? They have a stem They grow too. Where do the ants belong? They have little feet They can climb in your nose. What do ants belong in? They can sometimes go in your pocket. And pinecones too.*

As the year progressed, the children in Center PM grew closer as a community and began to look forward to creating stories together. Collaborative stories involved brainstorming and turn taking as children worked together to weave characters and plot into a cohesive story. Familiar nursery rhymes or fairy tales often acted as a springboard for reconstructed stories that they named “Something Different Stories.”

**Something Different Stories**

by Ameer, Ayla, Bijoy, Dylan, Emma, James, Julia, Julien, Namwook, Rishi, and Tatym

**Humpty Dumpty**

*Once upon a time, there was Humpty Dumpty who sat on the wall. He fell and cracked into small pieces. And then he needed someone to help fix him. The queen helped fix him, but made him into a duck. All the king’s horses and all the king’s men came. Then Humpty Dumpty turned into a horse. Then he turned into an elephant. Then he turned into Humpty Dumpty again. Then a big, bad spider came and Humpty Dumpty turned into a spider. Then the spider took Humpty Dumpty to jail. Then a policeman took him out of jail and put the big bad spider in jail. Then the spider was lonely. No one got him out again. The End*

**Little Red Riding Hood and the Three Pigs**

*Once upon a time there was a girl named Red Riding Hood. She had three little pet pigs. The pigs went to Little Red Riding Hood’s house to eat. When they got there, they went to the fridge. And they ate and they ate and they ate. Then they went outside. They drink water. They fell to sleep. Little Red Riding Hood saw the pigs asleep and then she woke them up. Then she chased them away. The pigs went to buy some milk. Then the pigs went back to Little Red Riding Hood’s house and she chased them away again. Then she found some sheep. Then the sheep went “baa baa.” Then the sheep were Little Red Riding Hood’s pets now. The End.*

**Jack and Jill**

Jack and Jill went up the hill to get a...
Parents played a very important role in the story project. They volunteered to read favorite storybooks, assembled blank books and transcribed the children’s dictated stories. They introduced the children to musical stories based on classical music, like Stravinsky’s *The Firebird* and encouraged the children to act out the story and dance to the musical score. The rich cultural diversity of our classroom was reflected in the folktales and fables from around the world parents shared with us. The children listened to a folktale from Korea called *Kong-gi and Her Sisters* and to a story from the Philippines called *The Spectacular Tree*, and collaborated on the retelling of these two tales to create their own versions with illustrations.

Even in this age of highly visual entertainment, children seem naturally drawn to the simplicity, spontaneity, and intimacy of storytelling. Many Bing teachers enjoy incorporating storytelling into story time. With a little encouragement and modeling, children were inspired to tell their own stories in front of the whole group. Many children found it helpful to use simple props as visual cues. They ranged from familiar classroom objects and playthings to creations from open-ended materials. Children discovered that materials like play dough or clay could be easily manipulated and transformed into characters or objects to illustrate their stories. Props also became the foundation for storytelling games. The “Three Object Story” was an exercise that involved children or teachers spontaneously creating a story around three unrelated objects. Painting at an easel and building with blocks were two other activities that often served as vehicles for narratives.

At the spring staff development day, Stanford University psychology professor and researcher Lera Boroditsky, PhD, told us about her experiences with Australian aboriginal storytellers, who drew simple pictures in the sand to illustrate the story they were sharing. Teachers introduced children to sand as a new medium for communicating their thoughts and ideas. They filled shallow wooden trays and recorded children’s words as they drew and told their stories in the sand.

Story time in Center PM traditionally incorporates repeated readings throughout the week of a carefully selected, engaging book. This supported the children’s story creation process.

Repeated tellings of an engaging story help the children gain familiarity with language, meaning, and concepts. Children also become more fluent in their retellings, often wanting to rewrite the story in their own words, or add their original ideas to the familiar plot, or play the roles of the story’s characters in a dramatization or “story play.”

Recently, at story time the classroom began reading *The Three Billy Goats Gruff* by Paul Galdone. The children were able to engage with the story through written text, music, and drama.

As the week progressed, children began to memorize the text, explored characters’ feelings and intentions, and retold the story in numerous ways. The interactions with this story provided children with opportunities for creative expression, social collaboration, and a forum for personal interpretations.

**JEREMY:** The goats are going on the bridge. The troll says, “Who’s walking on my bridge?”

**ILLIANA:** The goats are going to the beach. They are walking over the bridge. The troll feels bad and says, “What’s that goats?” He says, “I’m nice now.”

Children are natural storytellers. Our role as teachers is to support and gently guide their extraordinary capacity for expression. As our project came to a close, children, teachers, and parents recognized that we had created a dynamic community of storytellers that recognized, respected, and celebrated each child’s unique voice.

Inspired by Stanford research about Australian pygmy tribes that told stories using sand drawings, Center Room teachers provided sand trays and asked children to draw in the sand and narrate stories based on those pictures. The stories and photographs of the pictures were later compiled in booklets.
Doctors at Play: A Window into the Value of Socio-Dramatic Play
By Peckie Peters, Head Teacher

“Lola and I are going to make sure the bunnies are healthy,” announced Bradley one Friday in West Room. “We’ve already checked them, but we’ll keep an eye on them to make sure they’re OK,” he reported earnestly. “Oh, are they sick?” a teacher asked. “No, but if they get sick we’ll take them to the doctor.” Like Bradley and Lola, the children in West Room had been committed to the bunnies’ well-being since their arrival earlier that month: Giving food, using quiet voices, filling the water bottle, keeping their house clean. Thinking about the bunnies’ health was a new dimension to their responsibilities. Giving them an opportunity to explore this role through play seemed to be a natural segue.

The following week the patio area became a veterinary office, serving sick cats, dogs, rabbits, and the occasional baby. At the entrance was a waiting area with books and magazines focused on animals. Hollow blocks were used to make a desk that served as the check-in area, complete with computer keyboards, pencils, paper, scissors, and tape. There were also three exam rooms and an operating area including masks, doctor capes, shots, Band-Aids, stethoscopes, blood pressure gauges, empty containers, thermometers, and an oxygen mask (made of plastic tubing and a funnel which fit over the patient’s mouth).

What was the teachers’ motivation to follow this path with the children? As early childhood educators, we recognize that dramatic play is one of children’s strongest avenues of self-expression. This belief is supported by research that shows that dramatic play is a means to support children’s intellectual, social, emotional, and language development. Through dramatic play children can engage with their environment and each other, and construct knowledge about themselves and the world around them. This is significant because while young children often cannot differentiate between reality and imaginary worlds, dramatic play allows them to make this distinction. Teachers, in turn, support children in this process through keen observation, providing materials, and asking questions that enable children to build on their existing competencies.

The importance of dramatic play was visible on the first day that the children approached the veterinary office. A group of about 10 children explored the new set-up, perhaps because of its novelty, perhaps because it contained materials not commonly available to children, or perhaps because it responded to an interest percolating inside them. As teachers we need to carefully observe and listen to children to determine their specific motivation. Early childhood education scholars Beth Hatcher, PhD, and Karen Pett, PhD, state this concept well: “Dramatic play is a lens through which the process of children’s learning becomes readily visible to early childhood educators.”

Teachers watched closely as Joslin approached the veterinary office, which was filled with stuffed animal “patients” waiting to see the doctor. She picks up a small brown dog announcing: “His paw’s hurt. He stepped on a big sharp rock.” She proceeds to give him a shot, and then wraps the paw with gauze, deftly holding the dog with one hand as she administers the treatment. She looks casually in his ears, using the tool generally used for checking knee reflexes, and declares: “He’s got some big ear wax and it’s got a cut inside too.” Without hesitation she takes a long cotton swab and “cleans out” the ears.

Teachers understand that in this play scenario Joslin not only gets to act out her own experiences but this time she is the person in the controlling position. From this perspective it is safe for her to imitate and mimic the physical world and human relationships using symbolic representation. Her skills of memory retrieval are at work while she also practices her ability to transfer memories from reality to fantasy play. Pretending allows Joslin to represent real-life problems and practice solving them.

The next day, teachers observe a child who is not quite ready to “treat patients” gain confidence by observing his peers. Carter watches as Luke and Avery tend to two sick bears. One uses the stethoscope to listen to the patient’s heartbeat, while the other uses tweezers to remove a “bug” from the bear’s ear. Carter puts the doctor’s mask on his face and hooks the stethoscope around his neck. Though he doesn’t pick up a patient, he holds a pair of tweezers in his left hand and continues to watch the other “doctors” carefully. He moves back and forth between groups of children, watching their movements and listening to their conversation. He is particularly attentive when Caroline makes her own Band-Aid by putting a small square of construction paper in the middle of a strip of Scotch tape. Two days later when Carter is at school again he finds his own “patient” and immediately begins to create a Band-Aid for his hurt paw. A teacher comments that she had seen another child make a Band-Aid like that. Carter looks up and smiles.

Carter was able to take advantage of the dramatic play set-up at his own pace. While not directly involved with the materials, he gathered information about how play scenarios occur. When he had witnessed enough to gain the confidence to engage, he also demonstrated his ability to transform a concrete object into a symbolic one. The teacher helped him to understand that he had learned some information from watching his peers, so he can perhaps use that strategy another day.
On the third day of the set-up, children explore and develop their literacy skills. Marisol sits at the reception desk, using “cursive writing” to make a list of patients who will come that day, drawing connect- ed swirls of lines and carefully hitting a series of computer keys after she writes each line. Jacob is working at the keyboard on the other end and leans forward, knocking down the boards that are the desktop. He and Marisol immediately begin to fix it but it is slightly wobbly and they can’t get it to balance. Jacob gets a piece of paper and says to Marisol: “I’ll be back.” Marisol asks a teacher for help fixing the desk and goes back to work on her list. Jacob asks another teacher for some help sounding out words in a letter he composes. It reads: DR I CNT @@ OF HO TO PT THE (picture of desk) AT THE AAAAAA (Doctor, I can’t figure out how to put the desk at the hospital.) For the words he knows, Jacob put down the sounds he could hear. He reads back his note to a teacher to make sure it sounds right. When he got to “figure,” he explained, he thought that it was too long a word so he just did a “design so people would know.” When he got to “hospital” he described how the word sounds like a lot of short “a” sounds, “a-a-a.”

Teachers can observe that Marisol and Jacob have solid foundations in literacy. Play provides them a vehicle for assimilating what they are learning about the functions and conventions of print, and teachers can support their development as needed. Simultaneously, they practice skills of problem-solving, flexibility, negotiation, and cooperation.

Later that morning, dramatic play brings two children together who don’t frequently play together, but who had a shared idea. Ada announces to no one in particular: “You can put this [her kitty] in the X-ray because I think she has a broken bone.” Jacob, who hears her mention the X-ray, asks: “What’s wrong with her, Ada?” Ada responds to Jacob: “I think she has a broken bone!” Jacob inserts the kitty into the hollow blocks that he has constructed to be an X-ray machine. He inspects it by looking through the spout end of a water bottle that he has attached with masking tape to one side of the blocks. He stands up and looks seriously at Ada. “I think she’s OK,” he reassures her. Ada hops up and down and smiles an enormous smile, clapping her hands. Jacob smiles back, visibly pleased.

In this scenario the two children are brought together by a shared interest in the X-ray machine. They are both invested in finding a solution to a problem, and in the process they share information, ask questions, offer emotional support, and enjoy the experience of working together. Each clearly appreciates the other’s knowledge and sensitivity, both indicators of a move from egocentric to social play.

By Friday, the children have had several days to explore the veterinary office. Their comfort with the materials is visible and they begin to explore different roles. Tara holds a stuffed cat in one hand, a telephone balanced in the crook of her neck, a pencil and clipboard in the other hand. She is shifted her action to keep the play going. She assigns them roles, which they readily accept, and goes on to demonstrate speech that is often heard in a doctor’s office. Tatiana builds on the information that Tara initiates and implicitly demonstrates her understanding of the role she is playing by adding her own contact phone number.

The veterinary hospital remained a part of the patio set-up for two more weeks, until teachers saw a decrease in children’s interest. Having two hours before snack time each day to explore different roles, incorporate new information and interact with peers gave children time to investigate their interest at this time. Most children in the class had at least come to our veterinary hospital to observe. Many came to play for more than an hour each day. The value of this play, in my opinion, cannot be overemphasized.

My hope is that the previous examples help to clarify how dramatic play plays a central role in the early childhood classroom because it allows children to learn about the world in ways that make sense to them. When children engage in dramatic play they can clarify their feelings, try on a variety of roles, develop problem-solving skills, and enhance their communicative abilities. They also learn skills of organization and prediction and are able to focus for extended periods of time. Dramatic play facilitates children’s ability to think symbolically and to share those thoughts with others, both skills they will use as they become independent readers and writers. As parents and educators we need to acknowledge, support, and celebrate the important role of dramatic play.

Tara, playing the role of a doctor, administers a shot to a stuffed bunny as Rebecca and Ada wait to assist.
Worm Project
By Parul Chandra, Head Teacher

What is a project? At Bing, a project is an in-depth investigation of a topic worth learning more about. For 10 weeks last fall, the children in Center AM studied worms.

Usually a small group of children within a class undertakes the investigation, though sometimes a whole class, or occasionally an individual child takes it on. The key feature of the project is that it deliberately focuses on finding answers to questions about a topic posed either by the children, the teachers, or the teachers in collaboration with the children. An integrated approach allowed the children to use a range of learning strategies to learn about worms. As a result, they investigated and studied worms in ways that matched their individual learning styles.

Good project work provides meaningful context for children to apply their developing skills. Through our worm project, children had opportunities to develop intellectual dispositions such as being curious, experimental, analytical, exploratory, investigative, and thoughtful. The longer the project, the stronger these dispositions grow.

Noted early childhood education author Elinor Fitch Griffin—a favorite of Bing director Jeanne Lepper—underscores the importance of projects: “…through endeavors like these, children are learning something more valuable than facts and skills and achieving something more worthwhile than a product. They are learning how to think.”

How it began…
Our worm project began with children’s interest in digging for worms. Many children explored the Center classroom’s outdoor environment, looking for worms under logs, rocks, and in our garden box. Small groups of children decided to visit the West room yard to see what they could find there. The children from the West AM class welcomed us and helped us find other “worm hiding spots.” They were also very interested in the worms. Every found worm was an exciting experience. Others would gather around the found worms to watch, hold, and talk about them.

Searching for worms:
JOJO: I have to get four worms because I’m four.
CARMEN: Look these worms are kissing.
NICOLE: I’m helping my worm getting up right side up. When it’s white it’s not right side up but when it’s black it’s right side up.
JOJO: Worms move different from snakes because I think snakes are longer and worms are smaller.
NICOLE: This worm is going to look for his friend. Look the worms are hugging.
JOJO: These are two worms and they’re looking for their friends. Is it under the leaf? Yes!!! I’m making a worm farm.
CARMEN: Worms eat leaves with dirt.
JOJO: I think worms eat dirt and cherries.
NICOLE: I think they eat leaves.
HUMZA: Leaves. They live under leaves.

The interest in worms spread when Carmen’s mother, Norma, and Jojo’s mother, Janet, brought in and helped assemble a worm farm for our classroom. Similar to an ant farm, the worm farm gave children a clear view of the worms tunneling through soil. The children began to make comparisons and predictions about these worms.

The project unfolds:
The investigation began. Children observed worms and shared their knowledge about them. Our researchers were excited and curious to know more about the worms, and they started to gather information. They used their peers, teachers, books, and their own experiences as resources to help them answer their questions.

Children drew what they observed. After group discussions, the teachers asked the children to draw their thoughts and discoveries about worms. These drawings gave children the chance to refine their perceptual and fine motor skills. We watched children share their work and talk with others about their theories. They referenced each other’s work to build on their own interpretations. This learning style helped to bring in other children who were onlookers. We shared our discoveries at snack and at story time to increase their visibility. Soon the project involved a large part of our classroom community.

Worm observations:
CASSANDRA: They squiggle into the dirt to stay warm.
LEON: The dirt is his home.
PETE: If a mountain came down on the worm it would smash it.
ERIK: That one is long, but that one is even longer.
BRYSON: That one looks longer. The longer worm has more segments.
ERIK: They go into dirt because they need more food. They eat rocks.
BRYSON: This is the head because it is moving this way.
CARMEN: If the sun comes to the dirt and the rain comes to the dirt, the worms might fix the dirt. They like the gardens.
NATALIE: They eat with their mouth, they have no teeth.
ISABEL S.: They like shade and dirt, grass, and dirt.

Exploring our resources:
It was clear that the group needed more information. So children gathered
references from the school library and teachers brought other books from local libraries and bookstores. Children used the books in a number of ways, for example, they compared their drawings of worms to the drawings in the books. And they often referred to books to help them fine-tune their questions.

An invited speaker, Peter Ozorio, an entomologist, served as another resource. During story time one day, we presented him with our questions and listened to his presentation on worms. His demonstration of how to prepare worm food excite the children, generating a lively discussion. After his visit, the children were inspired to explore this topic through different media. Children constructed worms with clay, painted them with watercolor and tempera, and worked with pretend worms in a garden box. They explored worm movement through creative expression at music time and built new homes to keep the worms safe from the birds.

At the language table children shared questions and shaped their theories about worms:

Question from Carmen: Why do worms escape from the birds?
ISABEL S.: Because birds like to eat worms.
ANNA: Because birds eat worms. It wasn’t easy finding worms because the birds ate the worms.
LAUREN: Actually, worms are slow so the birds can catch them. If the worms grow fat then the birds can’t eat them. If they go skinny then the birds get them.
CHLOE: Because birds eat worms.
JACK: Because they get eaten by birds.
ADAM: Because they’ll get eaten. You know how they escape… they dig!
NAJA: Coz the birds might eat them.
LEON: Because they like it.
Pete: That’s because they don’t want to be eaten by birds.
LAUREN: Because they’ll get eaten by birds.
ELEANOR: Because the worms don’t want the birds to eat them.
SWATI: Because they know that birds like to eat them and because they want to save their lives forever.
JAMESON: Because they get hurt from the birds.
AVA: Because they might think they might be stepped but they won’t.
KIMI: Because the worms get cut by them.
CASSANDRA: Because they like to eat them.

The teachers introduced materials and activities to extend and enhance this investigation. Children used flannel cut outs to tell stories about worms. Children painted with yarn dipped in paint to explore worm movements. As they looked for worms, they came upon other bugs and enjoyed identifying and classifying them. This lead to a discussion about including other insects in their worm farms. In the end, they decided unanimously that these new bugs were not worms and therefore did not belong in the farm. They found centipedes, millipedes, roly-poly, and a salamander. Jojo said, “Salamanders are the worm’s uncle.”

Children formulated their ideas and placed questions about worms inside a box. Some of these questions included: Why do worms dig on dirt? Why don’t worms have feet? Do worms eat flowers? How do they move?

Paul wondered “Do worms wiggle?” and children shared their theories about this question:
JACK: Yes, because they have no legs.
MADELINE: Yes, because they’re worms.
NATALIE: Yes, they’re earthworms.
ANNA: Yes, they go skinny fat… skinny fat.
LAUREN S.: Yes, that’s how they get around.
ZOE: Yes, because they don’t have feet.
COLE: Yeah, because they need to move.
DAVID: Yeah, because I think that’s how they get down the hole.
CARMEN: Yeah, because they escape from the birds.
ANNE: They squirm…
NAJA: Yeah, ’coz it makes them warm on cold days.
LEON: Because they like it. Birds eat some worms.
Pete: Yeah, that’s because they’re slimy.
LAUREN V.: Because that’s how they go places.
KIMI: Yeah, because they’re slippery and slimy.
SWATI: Yes, because they need to move and they need to wiggle to more.
CASSANDRA: Because they can’t walk. They have no legs.

After spring break, children revisited the worm project. Groups hunted for worms and other bugs. Children talked about their experiences, bringing in stories, bugs, and other insects they found at home and in school. We invited Peter again, since children wanted more information about their new finds.

Like many other experiences, the development of this project was unpredictable and emergent. It unfolded as a particular group of adults and children interacted, setting in motion a unique dynamic. An emphasis on developing a sense of “we” was established and reciprocity was maintained. Children’s verbal and graphic exploration jumpstarted the project. The project’s development was based on questions, comments, and interests of the children involved. Most important, children had ample time to come up with their own questions and explore many different possibilities.

The quarter ended with us returning the worms to their natural living environment in the garden. As the children gathered around the garden, several said: “We made the worms a home.”
Early in the school year, children in the West afternoon classroom began a conversation at one of the snack tables about where their grandparents live. While some children have grandparents nearby, many have grandparents in far-off places throughout the world. This began an investigation into where each child’s extended family lives. Children were interested in having these different places indicated on a globe and a map.

Through this investigation, we realized that we had families in the West afternoon classroom representing every continent, except for Australia (and Antarctica, of course). We also have many countries represented, including Argentina, Belgium, China, India, Japan, Korea, Mexico, Nigeria, the Philippines, Singapore, Tibet, Vietnam, and various states throughout the United States.

This diversity prompted us to follow the topic of “Families Around the World.” Our goal was to offer a glimpse at how families in other places live and learn about their cultural practices. We invited families to participate in sharing something of their cultural communities with the children in the West PM classroom.

We started by learning about the art of origami, a paper folding craft from Japan. Parents assisted the children in trying to follow directions from origami books. Children enjoyed learning to make simple shapes and have continued to try to make different shapes on their own throughout the year. During a visit to our school, some Japanese educators were happy to see children working on origami and they were able to engage with the children through this common experience. Later in the year, we also had an opportunity to learn to make (and eat) sushi.

A family from Nigeria taught us about the traditional wedding ceremony from that country and modeled the typical native dress. We also listened to music from Nigeria. The children found it interesting that dress and music can vary from one place to the next. A family from Switzerland brought some clothing from that country along with photos, which highlighted that the geography elsewhere sometimes differs from our own area and that climate can influence the types of clothes worn in different countries.

In January, we had the chance to learn about the celebration of the Chinese Lunar New Year. Children enjoyed the story about how 12 animals were chosen to represent the different years and learned which animal represented their own birth year. Some children preferred to self select their “favorite” of the animals, rather than being represented by the prescribed one. We learned about the practice of giving and receiving the traditional red envelope with money enclosed. Children also made paper lanterns and had a parade in the classroom yard complete with a dragon. The children enjoyed marching and singing, “Gung Hay Fat Choy!”

Over time, we learned songs in different languages and various ways of saying hello. We had parents share how to write children’s names in both Tibetan and Japanese characters. Some children were interested in trying to duplicate the characters on their own.

Our topic, Families Around the World, has given us a better perspective on the many ways people dress, eat, celebrate, play music, write, and speak. It allowed us to feel connected to each other both within the classroom community and as a global community. It also broadened children’s awareness and helped develop their ability to take another person’s perspective. We thank the many families that contributed to making this a rich and rewarding experience. It has been a fun, engaging, and inspiring topic to explore.

Clockwise, from top left: Jenny Shemwell guides Mia and Fiona through the process of origami. Sandy Shapero shares materials about the winter solstice with Clement, Julian, Kate, and her daughter Sky. Quin Yow works with Zachary, Max, and Sky in making paper lanterns for Chinese New Year. Tenzin Dingpontsawa demonstrates Tibetan writing to a small group of children including his daughter, Sela, and Divya. Tolu and Bisi Akinola share some clothing, music and cultural practices of families in Nigeria.

Families Around the World in West PM

By Karen Robinette, Head Teacher
Singing in the Classroom Spurs Learning in the PM Two’s
By Kitti Pecka, Head Teacher

Music time after snack fills the PM Two’s with joy—and not coincidentally, boosts their brain development. The sessions illustrate perfectly the concept of interactive learning.

Much of the new research on learning emphasizes the important role emotions play. Both positive and negative emotions can affect learning. A stressful environment can impair development; positive emotions aid learning by establishing meaningful connections between people and amongst the many neurons in the brain. The coordination of interactive learning with many opportunities for individual expression in the well-prepared and well-facilitated classroom creates a climate for growth. Skillful facilitators (teachers and parents) observe, guide, and respond within a framework informed by research.

This research and our own observations have furthered our understanding that children not only enjoy working in small groups, but also benefit from the association. Language development provides a prime example. The motivation for very young children to speak often comes from the warm response of a friend. The reinforcement of vocabulary can come from a book and from favorite songs, but it is when it is shared in a group that the child truly communicates.

This feeling of community and climate of growth is especially evident in the small group activities of two- and three-year-olds. Though at the beginning of the year they might be engaged only peripherally, by spring the interactive dynamic emerges as their most compelling motivation. Perhaps the most dramatic example has been their behavior at music time, held after snack. (Well-fed, rested children are better able to learn.) Their enthusiasm for the song Going on a Bear Hunt—conveyed by their contributions of sounds, chants and rhythms to accompany the poetic verses—was joyful and full of facial expression and playful exchange. Mitchell growled like a bear, and Miki yelped with delight as she struck the guiro percussion instrument in a quickening tempo. Quinn barked when the dog was part of the action and others followed with their own barks. Experimentation with instruments was a favorite part of the game. Erika showed the others how to make a louder sound with the guiro and Emily skillfully established a steady beat. Amelia was able to syncopate the rhythm. Each subtle change enriched the game, taught a new skill, and furthered the learning.

It makes a big difference in a child’s learning to feel a part of this group creation. Praise from adults, while worthwhile, lacks the power of peer reinforcement. This form of interaction makes each experience a meaningful learning experience: it’s a personal connection and a brain connection. Each original creation on the part of children collaborating is a step towards an original solution. Confidence to make new solutions in cooperative learning grows minds and bodies strong and healthy. This is not only a goal for nursery school but is also a mindset for confident, cooperative problem solving, establishing a precedent for the future.

Maple Syrup Tree

As part of a classroom project focusing on trees, children in East AM constructed trees in the sand area. Following is a dramatic play scenario the children created. For more information on the project, see page 13.

This winter our tree construction took a fanciful turn. Using cardboard tubing, paper and craft sticks, the children made a lollipop tree (inspired by the Burl Ives song), which was then followed by a rainbow apple tree and a maple tree, which squirted syrup like a fountain. After constructing the trees, the children engaged in elaborate dramatic play using the trees as props. Farm animals came from far and wide to sample the lollipops. Princesses picked the colorful apples and baked them into plump pies. A pack of dogs developed a hankering for pancakes, which were produced on an assembly line and topped with syrup collected from the maple tree. Then, in a surprising turn of events, the maple tree suddenly receded as quickly as it had come, and we all went in for snack time. —Betsy Koning, Teacher
Each spring, teachers have the opportunity to come together to reflect on the passing school year and further develop their skills as teachers. This year, the recent return of seven teachers who traveled to Italy on a Reggio Emilia study tour and the increasing momentum of the Tower House renovation project made the spring staff development day a particularly exciting time to reflect on our own school’s history as well as its future. On April 30, teachers participated in a full day of discussion, learning, and small group work.

In light of the Reggio Emilia study tour, the entire teaching staff read the article, Reactions to Visiting the Infant-Toddler and Preschool Centers in Reggio Emilia, Italy by early childhood education professor Tess Bennett, PhD. The article nicely summarized the philosophy, environment, and classroom culture of the Reggio schools. Staff development day began with small group discussions of this article, with each group lead by one of the teachers who participated in the study tour. During this small group time, teachers learned more about the Reggio philosophy and then went on to discuss Bing’s philosophy and identity.

Teachers later came together as a large group to share their reflections on the Reggio approach as well as the work we do here at Bing. The staff also enjoyed looking through some mementos from Bing’s earliest days, over 40 years ago! Director Jeanne Lepper shared a beautifully bound book of photographs from the school’s opening, as well as Bing’s first brochure. Jeanne was a head teacher at Bing when the school first opened, and she has carefully saved these artifacts to remind us of the school’s beginnings.

The staff enjoyed the small-group discussion time. It was great to exchange and share ideas with colleagues who work on different teams. It was a moment of collective reflection on Bing’s philosophy/practices and those of Reggio Emilia in their own context.

The spring staff development day provides a time for teachers to learn more about the research that is such an integral part of Bing’s mission as a laboratory school. This year, we heard from seven researchers about their current work at Bing. The following studies were presented: Children’s Understanding of Generic Sentences; Monolingual and Bilingual Children’s Use of Mutual Exclusivity Assumption in Word Learning; Understanding Preschool Children’s Concepts of Food Categories; Language and Social Reasoning; Investigating the Importance of Diversity in Preschool; Children’s Behavioral Inhibition; Beliefs about Goodness and Helplessness; and Behavioral Investigations of Perceptual Learning. Researchers Aaron Anderson, Andrei Cimpian, Sean Drake, Caitlin Fausey, Allison Master, Davie Yoon, and Quin Yow shared the theoretical foundations of their work, the protocols they use in the game rooms, and their results thus far. We also heard from professor Lera Boroditsky about her research investigating the impact that language has on thought. (See page 8 for more information on Boroditsky’s research.) She has conducted this research with children and adults alike, at Bing and around the world.

The day concluded with time for more small group work. Teachers had the choice of working on documentation and classroom portfolios, attending the monthly Bing Writers Group meeting, or working on presentations for the upcoming parent seminar series.

Visitors from Abroad

Clockwise, from top: Twenty administrators and teachers of the Renoir Kindergarten and Elementary School in Taiwan visited Bing in February. Administrators and teachers of the Poppins Preschool in Japan visited Bing Nursery School last November. The teachers met with Bing teachers for a discussion and exchange. Sixteen faculty members and graduate students in the early childhood education department at Taipei Municipal University of Education visited Bing in January.
Reflections on a Study Tour in Reggio Emilia, Italy
By Emma O’Hanlon, Teacher

In the northern region of Italy rests the city of Reggio Emilia, famous to early childhood educators all over the world for its progressive and creative approach to early childhood education. On April 13, 2007, seven Bing teachers made a journey there to participate in an international conference. Joined by teachers from Australia, Brunei, Canada, India, Indonesia, New Zealand, Singapore, and the U.K., Bing’s teachers toured Reggio Emilia’s schools and attended lectures on the region’s educational philosophy and its translation to practice.

The Reggio Emilia early childhood public school system consists of 21 infant-toddler centers (for children ages 3-36 months) and 20 preschools (for ages 3-6 years). The schools are based on the concept of children as competent learners capable and deserving of learning in their own time and in their own ways. As such, the classrooms are rich with open-ended materials, and children are given space and time to interact with these materials as they see fit. Teachers often choose to design classrooms to focus on a concept, such as light, shadows, or color. They closely observe and document the children’s investigations and reactions for later reflection by both teachers and children. And close attention is paid to the “hundred languages” or varied modes of expression children use to explore, interpret, express, and interact with the world around them.

The Bing teachers also shared their insights while participating in discussions. Among the topics: the relationship between child development and education, fostering creativity in young children, building supportive communities for schools and children, the importance of documentation, and the intersection between culture and educational practice.

The Bing teachers who made the trip are Adrienne Lomangino, Emma O’Hanlon, Peckie Peters, Karen Robinette, Rinna Sanchez-Balyut, Seyon VerdiZabella, and Beth Wise. They share the following reflections:

Adrienne Lomangino:
Visiting Reggio Emilia was simultaneously centering and unsettling, affirming and inspiring. Although the school visits, classroom images, and exhibits aroused many ideas for the classroom, I was struck more deeply by the less tangible but salient values and philosophy that framed the educational system. I was immersed in a community that respected and valued children to the point that its members had consciously decided to make high-quality early childhood experiences a priority.

Coming from a culture that seems to be in search of the “right” way to teach children, I was drawn to the view espoused by Reggio Emilia educators: that teaching involves an ongoing quest to examine important questions about children, learning, and education. In her opening talk to the study group, Carla Rinaldi (former director of the municipal early childhood centers in Reggio Emilia) raised questions that shaped my experiences at Reggio Emilia and will continue to provoke ongoing reflection on my role as an early childhood educator. These questions included: What is our image of the child? Does childhood exist or is it a construction? What is the meaning of “to educate”? What does it mean to “make the child visible”? Rinaldi posed these not as rhetorical questions to answer in due course, but rather as questions for us to consider. Thus, long after I have finished the cheese and chocolate I brought home, I will have questions from Italy to continue pondering.

Emma O’Hanlon:
Bing’s founder, Edith Dowley, has been quoted as stating that as teachers, it is our responsibility to treat children as our “honored guests.” We must listen to children, value what they have to say, treat them with kindness and understanding, and give them our time, attention, and respect. This philosophy guides our teaching practices at Bing and also governs teachers’ interactions with their students in Reggio Emilia. I found it both inspiring and moving to learn how this world-renowned school system attempts to instill this respect for children not only in its surrounding community of teachers, parents, and staff, but also at a political level and on an international level—educating teachers from around the world, and promoting the idea of children as competent learners and current world citizens deserving of rights and a voice in the community.

Peckie Peters:
Reggio inspired me not only to think about how I view children but also how I view all those people who support children: parents, teachers, and politicians. I came away with new motivation for the need to advocate on behalf of children and their needs. It confirmed my beliefs about the innate competence of young children and stimulated me to look more deeply at how I support children in their development. Lastly, it helped me to acknowledge the many good things we already do for young children!

Karen Robinette:
One of the highlights of my experience was viewing a Reggio nursery school program for children ages three, four, and five. The day I visited Robinson School, Reggio’s founding school, built in 1963, five-year-old children were working in a small room that was divided by a sheer curtain. One half of the room was dedicated to the exploration of different materials on an overhead projector, while the other half of the room accommodated children designing a town. They were building with blocks and embellishing with drawings done on paper with black marking pens. This town had been “under construction” for a while and children were adding to it over time. Four-year-olds were exploring red poppy flowers using the medium of watercolors, while three-year-olds were working on the coil technique with clay.

I felt very privileged to be able to view another high-quality model for early childhood education. It was an incredibly stimulating and rewarding week of study.
It will undoubtedly take a long while to process all the information gained, but it will surely inform my own practice from here on. The Reggio Emilia approach to education, visit www.reggiochildren.com

The National Association for the Education of Young Children accreditation system has set voluntary professional standards for programs for young children since 1985. Programs are accredited for a period of five years. Bing has been continuously accredited since 1989. As of September 2006, the association introduced revised program standards and criteria and a new level of quality, accountability, and service for parents and children in child-care programs. The new standards reflect the latest research and best practices in early childhood education and development. NAEYC is committed to using the newest studies and analysis on positive child outcomes to ensure young children continue receiving the highest-quality care and education possible.

The staff and administration of Bing went through a yearlong extensive self-study process, measuring the program and its services against 10 new NAEYC early childhood program standards (relationships, curriculum, teaching, assessment of child progress, health, teachers, families, community relationships, physical environment, and leadership and management) and more than 400 related criteria. One of Bing’s head teachers, Adrienne Lomangino, was instrumental in the process. She attended sessions at the national NAEYC conference in November 2006 on the new accreditation system to help the administration throughout the process. Every classroom was responsible for putting together a portfolio documentation of projects created by the children and the teachers was quite memorable, and seeing the amazing documentation of projects as quite different from decoration and certainly much more than display. For Reggio Schools (operated by the municipality of Reggio Emilia and distinctive from privately owned schools in the city), documentation is the organization of collected materials that further a history of the school. Documentation appeals to the passion of educators because it makes visible what we know occurs but find so hard to capture, to remember, to revisit. Documentation offers children, teachers, and parents opportunities to “go back” and interact with what has happened in their school—to remember but even more to inspire new possibilities. Documentation is not for someone, it is with someone. Documentation perpetually provokes thinking about perceptions of how young children develop and learn. It also celebrates what we have come to know about a particular child, experience, teaching method, school, or teacher. We are inspired to think, to observe, to wonder, and to formulate and ponder questions that might be asked again and again, provoking more thought, more learning, more sharing. The answers are different in every moment but permanently a part of the experience that makes a school wonderful.

For more information on the Reggio Emilia approach to education, visit www.reggiochildren.com
Tenns of thousands of educators and child-care professionals from around the country descended upon Atlanta last November for the annual conference of the National Association for the Education of Young Children. With nearly 100,000 members, the NAEYC is the largest organization in the world that advocates for young children, with particular focus on the education and developmental services for children from birth through eight. For nearly four days, the attendees were treated to hundreds of sessions and events, all with the purpose of informing, challenging, and energizing adults who work with young children.

Bing attendees included teachers Nandini Bhattacharjya, Parul Chandra, Adrienne Lomangino, Emma O’Hanlon, Peckie Peters, Andrea Rees, Seyon Verdtzabella, Chia-wa Yeh, and myself. In addition to choosing from the wide array of sessions, O’Hanlon teamed with Rees to lead one session and Bhattacharjya, Peters, and Verdtzabella worked together to lead another. Meanwhile, Lomangino attended sessions focusing on the restructured, multi-stage extensive accreditation process.

This year, Bing went through the process, which occurs every five years, and was reaccredited in August. Needless to say, it was an exciting and exhausting trip.

Of the multitude of topics covered throughout the conference, children’s play was one of particular interest to the teachers at Bing. Although play is vital to the cognitive, social, and emotional development of children, it is often misunderstood and undervalued by both child development scholars and the general population alike. Conferences like NAEYC’s offer Bing’s educators exposure to the most recent professional thinking and research surrounding relevant topics like play. In one session on preschool early literacy curricula, Sue Bredekamp, PhD, director of research at the Council for Early Childhood Professional Recognition, identified socio-dramatic play (pretend play with roles, rules, props, and situations that persists for at least 10 minutes) as a highly effective tool in the development of children’s early language as well as the building of their emotional literacy. At a round table discussion about play, child development, and early childhood education, professor Alice Meckley, PhD, of Millersville University went even further, attributing play as the key to the construction of children’s neural synapses, their knowledge and understanding of symbols, and ultimately their creation of communities based on cooperation, equity, mutual respect, and shared knowledge, events, and responsibilities. These communities, Meckley asserted, are the very early building blocks of society.

As might be expected, Bing’s two sessions focused on play. The presentation by O’Hanlon and Rees, “Extending Play: A Teacher’s Thought Process,” used video clips featuring Bing teachers engaged in play scenarios with children to highlight techniques on extend and deepen a child’s play experience. Each clip illustrated a different means of extending play, such as focusing on children’s social development and relationships, using sand, and using literacy. Some of the many techniques included following the children’s lead and valuing their ideas, asking children open-ended questions to enlarge thinking and expand understanding, serving as an interpreter to enhance communication and collaboration between children, undertaking a temporary role in the play before stepping back as play is established, and highlighting other children as resources. The presenters also invited participants to make comments and ask questions about the techniques.

The other Bing session, “Playing with Gutters and Pipes: Engaging Young Minds in Scientific and Mathematical Explorations,” discussed the strategies for guiding children in their use of plastic pipes and rain gutters to develop and support a math and science curriculum. When children piece together actual construction material such as clear and solid pipes and rain gutters, they have opportunities to experiment, inquire and build theories. As they use water and sand with pipes and gutters, they build concepts in connectivity, flow, cause and effect, and gravity. Carefully watching both water and balls move through clear pipes and water, balls, and wheels move through gutters builds kinesthetic intelligence and helps construct physical knowledge. Children have opportunities to make and test their own hypotheses as they create their own pipe and gutter systems, thus laying the internal foundations of the scientific process. Pipes and gutters also encourage children to work with peers, providing important practice in collaboration, perspective taking, and communication.

Additional popular conference destinations were any of the wide assortment of presentations based on Reggio Emilia, an inquiry-driven educational approach that was born in Italy but has its roots in the work of an assortment of child development pioneers, including Jean Piaget, PhD, and John Dewey, PhD. In this dynamic system, teachers strive to understand the processes of children through respectful, thoughtful listening, open-ended questions and extensive documentation. Teachers aim to create an environment of respect where children can express their ideas through artistic media. The teachers then reflect on the work of the children individually, collectively, and in partnership with the children and their parents. In the seminar “Relationships Between Reggio Emilia and Teacher Research: Applications to Daily Practice and Teacher Education,” Lella Gandini, PhD,
By CAEYC Conference

Beth Coffman—a former supervisor of early childhood centers in Reggio Emilia, stated that this vital collaborative work between child, teacher and family needed to be “integrated into the social fabric of the community” and used as an “instrument for social change.” The ideas and practices of Reggio are quite popular, as evidenced by the 13 sessions devoted to it over the four days. Bing Nursery School shares the value of process- and inquiry-focused Reggio environments, where the child is deeply respected and where documentation and reflection are used as an avenue toward greater understanding of the cognitive, emotional, social, and artistic processes of children.

Through the exchange of ideas, concerns, and experiences at this annual meeting, teachers celebrated each other and held out hope, support, and information that served to counter the often daunting and exhausting aspects of this work. Much was shared about the struggle to meet the standards set in the No Child Left Behind Act while also providing a curriculum that is creative, relevant, and exciting for children and teachers. In fact, the two most heavily attended sessions I witnessed dealt directly with early literacy curricula for preschool-aged children.

At the conference, it became apparent that as teachers strive to better understand and serve young children, many are increasingly aware of and stand in opposition to the pervasive negative influence of the media on minds of young people. Diane Levin, PhD, professor of early childhood education at Wheelock College, spoke at a session about problem-solving deficit disorder, a new dilemma faced by children with too much exposure to mind-numbing, pacifying media content. “It interferes with their ability to engage in play that promotes optimal development, learning, social skills, and conflict resolution.” Levin offered solutions such as accessing grass roots media awareness organizations; encouraging play that allows children to be active, creative, and employ open-ended materials; and creating connections between parents and educators who support play and problem solving.

Perhaps the most lasting concept I encountered at the conference was that of intention. At the aforementioned preschool early literacy session, Lesley Morrow, PhD, an education professor at Rutgers University, argued that children need “intentional teaching.” Gandini of Reggio Children described that organization’s philosophy as “process and intentional thinking.” Young children, often because of their age and size, can be readily discounted, disrespected, and objectified. Consequently, their work in preschools and nursery schools, as well as the roles of teachers and other professionals who work with those children, can also be dismissed and diminished. It has become increasingly crucial to early childhood educators that they develop a deeper understanding of their students, both on personal and developmental levels. This allows teachers to make conscious, intentional classroom choices, keeping in mind their appropriateness for each child. Teachers also need to be able to explain to each other and to parents what it is they do, why it’s important, and how it will further the development of children at this crucial age.

While the above challenges might appear daunting, they are essential to meet if early childhood educators are to receive their deserved respect and significance. I am grateful to have attended the 2006 NAEYC conference, where issues fundamental to young children and those who work with young children were discussed and debated. It has elevated and energized my teaching practice and philosophy.

Observational drawing of a pheasant feather. By Anyi H., 4 years 4 months

CAEYC Conference
By Lisa Wesley, Teacher

This year’s California Association for the Education of Young Children conference, held in San Jose, March 8-10, 2007, began as it always does with a “Leadership Day,” gathering directors, administrators, and others interested in leadership roles in the early childhood field. I always love these days because they give me a chance to be inspired by mentors in our field. The keynote speaker, child care management expert Roger Neugebauer, asked people to stand as he called out the number of years people have worked in early childhood education, and then acknowledged a few who have been in the field the longest. When asked to pass on advice, one of the acknowledged, Beth Coffman—a former supervisor of mine and director of program operations for the California child-care program operator Child Development Inc.—suggested that we be self-reflective in our work with children and families. I appreciated this reminder, knowing that it can be all too easy to become stuck in a mindset that doesn’t serve us well anymore.

Neugebauer, who is publisher of Child Care Information Exchange magazine, went on to talk about what he feels are the essentials of leadership: imagination, determination, inspiration, perspiration, and continuity. He quoted a variety of people to illustrate his points. Napoleon said that a leader is a dealer in hope. Neugebauer expanded on this by saying that as leaders we need to be sources of continuing optimism. I think this is true for anyone in the lives of children. Another piece of advice he offered came from Alvin Toffler, who suggested we think about big things while doing small things so the small things go in the right direction. I love this idea!

The next two and a half days were filled with a variety of workshops, meetings, and demonstrations. Some workshop topics were about healthy foods, designing playgrounds, brain development, team building, advocacy, higher education, and infant massage. The program also included performances by Ella Jenkins, Hap Palmer, and Greg & Steve, all well-known children’s musicians. One especially interesting keynote speaker was John Wood, a Microsoft...
executive who left the company to start a nonprofit group that builds schools and libraries for children in Asia.

Bing teachers contributed to the offerings. Nandini Bhattacharya and Parul Chandra presented on creative expression through clay. Andrea Hart Rees and Nancy and Seyon Verdzabella presented on aesthetic setups in a play-based environment. Beverly Hartman, Adrienne Lonangino, and Karen Robinette spoke on fostering literacy in play-based programs. Michelle Forrest and Beth Wise offered insights on combining music and literacy, and Emma O’Hanlon and Andrea Hart Rees discussed extending play. All of the workshops, including those given by the Bing teachers, were packed! It was estimated that 4,200 early childhood professionals were in attendance. People were literally waiting in line to enter rooms even after workshops had begun. With so many workshops, it was hard to choose, but some of those I attended were on adult learners, multiracial families, and two on special needs children.

I chose the workshop on adult learners because in our field we learn a lot about working with children but seldom learn about how best to pass that knowledge on to other teachers or parents. We started this workshop by sharing information in pairs. The presenters, Judy Ishiura and Diane Harkins, explained that this is a strategy that helps people to feel comfortable right away and be more likely to share with the group. Ishiura, a trainer and coordinator for WestEd, and Harkins, director for the Center for Excellence in Child Development at University of California, Davis, went on to point out a few things about adult learners that we all know, but might not think about when putting together a workshop. For example, adults want to feel in control of their learning process and they want expectations of trainings to be made clear at the start. The presenters also discussed the efficacy of various teaching methods. The most effective training methods involved having the participants immediately practice what they learned or teach it to others. Group discussion was also said to be very effective while lecture was said to be the least effective. They also suggested using a variety of activities in order to use everyone’s preferred learning modality at some point in a training.

The workshop on the multiracial family was designed for those working with biracial, multiracial, and transracial adopted children. The presenter, Tarah Fleming, who directs the Multiethic Education Program, a program that creates publications and trainings to meet the needs of the multiracial community, urged us to be aware of our own bias and feelings regarding race and identity. The workshop was meant to begin the discussion of how to talk with children about race and identity. She explained that while love from one’s family helps children form a healthy racial identity, discussion is important as well. She also explained that those who are bi- or multiracial often experience pressure to choose one race with which to identify. These children need adult support to process their dual- or multi-race identity, and all children need support in the development of positive racial attitudes. She also reminded us not to assume we know what parents think or want.

I spent quite some time at the conference immersed in the topic of children with special needs. The first workshop I attended on this was given by Ginger Harnett from First 5 California Special Needs Project, a program aimed at improving access to services, and Michelle Martin, parent of a special need child. It touched on the process of referring and assessing a child who is not developing typically and what it is like from the parents’ point of view. The presenters talked about how the process can overwhelm a family. They emphasized the importance of good communication between parents and caregivers. Martin underscored how important it is for parents to research their options so they can ask for the services they feel they need. Also, a parent who has never gone through the process benefits greatly from help from someone with experience of their own.

The next workshop described a style of working with special needs children that emphasizes relating to the children on their level. It’s called Floortime and was developed by Stanley Greenspan, MD, an expert on early childhood development. The workshop was given by Nora Daley, Mindy Newhouse, and Stacy Wasserman from the Center for the Whole Child, a center that provides trainings, consultations, and one-on-one work with children with special needs. Daley is a special needs family consultant, Newhouse, a speech-language pathologist, and Wasserman, a child development specialist. To work with a child in this style, you follow a child’s lead in play while also trying to accomplish your goal. This is done by first observing a child’s play, then joining in by doing what they are doing. As you develop trust, you find creative ways to extend and expand their play. In this style, building the relationship is important, as well as paying attention to a child’s developmental level and individual needs. The presenters state that this style is different from others in that it helps a child achieve planned goals through personal interaction with caregivers instead of working on their own.

Between workshops, there was time to browse the exhibition hall, where attendees could find CDs, books, the latest educational materials, and information about fundraising and professional growth opportunities. We also had time for networking with old and new colleagues. These conferences are a great chance to meet people, get new ideas, learn more about a topic, and refresh yourself. I always look forward to them.

**Back to Bing Night—Our Fall Reception**

Back to Bing Night is an important opportunity for Bing parents to meet teachers and other parents and to receive information about upcoming school events and fund-raisers.
Professional development conference this summer offered a wealth of inspiration for enriching programs at Bing. The theme for the conference, “Intentionality in Early Childhood Education,” grabbed my interest. The conference organizers defined intentionality as follows: “Being planful and deliberate. Knowing what you’re doing and why, and being able to explain it to others. Having a vision—as educators, as administrators, as a profession.”

About 2,000 early childhood teachers, teacher trainers, researchers, and administrators attended the NAEYC professional development conference, held June 10 to 13 in Pittsburgh, Pennsylvania. I jumped at the opportunity to attend—and as the only Bing staff member at the conference, I shared my observations when I returned. Following are some of the highlights:

**Findings about a major child care study**

Susan B. Campbell, professor of psychology at the University of Pittsburgh, is one of the principal investigators for the much-cited, large-scale, long-term National Institute of Child Health and Human Development Study of Early Child Care, which has been uncovering how variations in child care are related to children’s development. Campbell outlined the study design and findings. Among the major findings is that quality of care matters. For example, children who received child care of high quality scored higher on tests of language and cognitive skills than did children who received child care of lower quality. These gains in language and cognitive development persist through middle childhood. Campbell also noted that family effects are always stronger than child-care effects. For more information on this study, log on to http://secc.rti.org.

**Teacher research**

Four education researchers—Amos Hatch, PhD, University of Tennessee; Barbara Henderson, PhD, San Francisco State University; Ben Mardell, PhD, Tufts University; and Andrew Stremmel, PhD, South Dakota State University—talked about what teacher research is, its relevance to the field, and shared some examples. Stremmel defined teacher research as “intentional and systematic inquiry done by teachers toward the goals of gaining insights into teaching and learning, becoming more reflective, effecting changes.”

Mardell shared his experience in conducting teacher research with his colleagues at the Eliot-Pearson Children’s School at Tufts. To promote school-wide inquiry, the teachers investigated the power of engagement in small groups of children. Using documentation as a tool, teachers were able to “zoom in on a particular moment” and reflect on their own practice. One study looked at children’s “feedback conversation” about their paintings of a pair of roses the class was focusing on for a 10-day project. Teachers invited children to talk about their paintings. Children also gave each other feedback. The research found that four-year-olds are quite capable of giving each other feedback. Well-documented examples are available online in the “Voices of Practitioners” section in Beyond the Journal on the NAEYC website: http://www.naeyc.org/btj/

**An intentional model of professional development to support culturally and linguistically diverse children in prekindergarten**

Four teachers from the University of North Carolina at Greensboro—Swetha Chakravarthi, PhD, Joanna K. Hansen, Belinda J. Hardin, PhD, and Cinthya Saavedra, PhD—presented a model of professional development to support culturally and linguistically diverse children in prekindergarten. The replicable model incorporates phases such as training and planning, coaching, evaluation and research.

The team stressed the importance of using children’s home language. Rather than discouraging children to use their home language at school, the team maintains that language is intimately connected to one’s identity. They suggest it is in fact important to use children’s home language because one cannot separate language from the self, culture, and ways of knowing. Through training workshops, meetings, and one-on-one consultation with six doctoral students, teachers reported changes in their own beliefs such as the importance of using children’s home language and understanding of typical development in second language acquisition (i.e., the initial “silent period” when English language learners are not speaking). It also raised awareness of the importance of involving families, and underscored that knowledge is socially constructed. The model also resulted in changes in teachers’ practices (i.e., collaboration with other teachers), changes in the environment, and their relationships with families.

**Make-believe play and self-regulation**

Elena Bodrova, PhD, Mid-continent Research for Education and Learning, and Deborah J. Leong, PhD, Metropolitan State College of Denver, advocated strongly for using make-believe play to facilitate children’s ability to self-regulate. Bodrova and Leong defined self-regulation as “to think first and act later,” which involves “effortful control”—ability to stop doing what is habitual. For example, a child who plays the role of a customer at a pretend restaurant needs to inhibit his/her desire to go through the kitchen cupboards and stays in the role, for example, sitting at the table and ordering. The presenters stressed the link between make-believe play and self-regulation. They also touched on strategies for teachers...
to support children's development in make-believe play. For example, to expand children's repertoire, Bodrova and Leong recommend field trips. On field trips, they say, it's important to have the people children see demonstrate what they do and what they say on the job for children to gain an understanding of their roles in a social context.

Bringing content to children's self-directed block building
Sherry Copeland, PhD, Early Childhood Director, Region 5, Department of Education, NYC, and Sydney Schwartz, PhD, Professor Emerita, Queens College, City University of New York shared the professional development initiative they implemented in New York City. The initiative engaged teachers in identifying instructional strategies that strengthen science, mathematics, and social studies content of children's activities in a block play area. Through video clips, photos, and teacher reflection data, the trainers met with teachers regularly to facilitate their professional growth. They first worked to help teachers increase their knowledge of content and identify the content. Next the trainers provided coaching on strategies to interact with children in the block area. Finally, they helped teachers to better communicate the importance of block play with non-early childhood professionals.

Some strategies for interacting with children suggested at the session: • Validate what children are doing after careful observation to open route of conversation. For example: "Wow! That building is getting taller." "I see you're trying to fit a block to go in between. What do you think you can do?" • Pause, say nothing, give child time to think and respond. •Follow-up process questions to review actions and/or plan next actions. For example, "Do you need a lot more blocks to finish?" "How many more do you think you need?" • Gracious exit. Give suggestion or validation to show that you're interested and will check back with them.

I greatly enjoyed this conference because of its focus on teacher training and research. It was a great opportunity to hear about the latest research, learn about ways to implement professional development, and meet other teacher trainers and teachers from around the country.

Partnering with the Children’s Music Network
By Michelle Forrest, Teacher

Inspired by a children's music conference last fall, Bing hosted a "song swap" this March, bringing together more than 25 nursery school teachers, librarians, storytellers, and music teachers from throughout northern California. The group gathered around Bing's sunshiny atrium, sharing songs in honor of the Month of the Young Child and Women's History Month.

Beth Wise, Bing music specialist and head teacher, initiated the event while the two of us attended the Children's Music Network conference in Petaluma, Calif., October 10 – 11, 2006. The seminars were thought provoking, and the Saturday evening talent show was a wonderful forum to meet different musicians and composers, and learn from a variety of people and styles. Together Beth and I sang one of my compositions, The Seed, with Beth performing on guitar and me on violin.

The Children's Music Network is a nonprofit association of people across the United States and Canada who believe in the power of music to inspire, empower, teach, and bring together a community. Members of the network are parents, music teachers, songwriters, performers, storytellers, and radio hosts, who organize local, regional, and national gatherings to share with one another the power and beauty of music. Aside from spurring the song swap, the conference inspired us in other ways. Beth and I attended a seminar at the conference led by singer/songwriter Tom Hunter, who in recent years has been invited to hold sing-along events at Bing School. Hunter led the seminar much like a discussion, offering encouraging insights. He described the pleasure he has in observing how songs and music can encourage children to learn, to experience a full range of emotions, and to tell their own stories. He also spoke about the value of listening to children's ideas in musical settings: "Listening to children's ideas is actually the first step toward justice," he said.

Another highlight was a seminar with Mara Beckerman, formerly a Broadway performer and currently an elementary music teacher. We participated in chants, dance movements, and songs, while she led using a drum or guitar. Of particular interest to us as early childhood educators was the discussion about movement and brain development. We learned about scientific studies showing that cross-lateral movement enhances connectivity between the brain's left and right hemispheres. She reminded us in closing that allowing children to enjoy music and to move without inhibition has a powerful affect on their development.

As the weekend came to a close I realized that the seminars I went to were motivating because they put into words the philosophy behind the work we do at Bing. I left Petaluma with increased excitement to allow children to be free to move, think and develop in the classroom, and I had renewed enthusiasm to be a careful listener and supporter of their ideas.

The song swap at Bing, five months later, provided another source of inspiration. The afternoon was so successful that the participants have continued to share song titles and lyrics by email. We hope to continue hosting this event at Bing as a way of building and maintaining this relationship with Children’s Music Network.

Singing and chanting promote children's brain development.
My, how quickly our children grow. As some children and parents are just beginning to settle into Bing, others are preparing to take that next big step: kindergarten. “This transition into the formal setting of elementary school is one of the harder ones for us,” said Palo Alto pediatrician Rick Lloyd, MD, to the parents and others attending Bing’s 18th annual Kindergarten Information Night in January. Lloyd was joined by Susan Charles, the principal of the Palo Alto School District’s Ohlone Elementary, and several members of Bing’s staff. Lloyd and Charles’ opening presentations about the developing five-year-old child and comprehensive kindergarten readiness were followed by a question-and-answer session.

Lloyd, who has more than 30 years of experience as a pediatrician, began by describing the typical five-year-old child but reminded parents that children exhibit a wide range of qualities. Typically, though, a five-year-old wants to be good, especially at school. This desire to please can lead to a very difficult time at home if the child falls short at school and takes out the frustration at home. Discipline works well in response to bad behavior, especially time outs, Lloyd asserted. In implementing such discipline, however, it is important to remind the child that the discipline is for bad behavior, not because the child is bad.

The five-year-old child, Lloyd continued, becomes enthusiastic for everything life offers: friendships, school, ideas, and life itself. “You often hear them say, ‘I just love this and I just love that,’” he explained. While the child remains centered on the mother’s influence and support, he becomes more emotionally warm towards others. This is reflected in the development of playmates into friends, and the growing importance of extended family. Moreover, the child grows excited about learning—but sees learning as the accumulation of facts. That knowledge and the ability to recite is what a five-year-old believes makes her smart.

Lloyd also described the child’s physical development and needs. He suggested that 11 hours is the appropriate amount of sleep per night. At this age, children generally fall asleep easily and sleep well through the night. Additionally, although toileting is well-established, about 15 percent of boys will still wet the bed. They like the bath, although they might not be able to bathe themselves. The same can be said of dressing themselves. Around this age, children also become increasingly aware of themselves. One manifestation of this growing self-awareness is children’s increased consciousness of their own abilities and competencies, or lack thereof. This self-awareness extends into greater sexual awareness as well, which might lead children to stop exhibiting their former glee with bathroom humor and lean towards play with children of the same gender.

Cognitively, the five-year-old child’s understanding of the abstract and unreal is still developing. The child has no real understanding of the future, the past, or finality. Death might not mean as much to them: they see themselves as immortal, and so everyone else must be too, they might reason. Magic continues to astound them because it makes sense to them as if it were reality. Their belief in God can be very strong, similar to their belief in Santa Claus.

Fairy tales reach a peak as an emotional outlet for violence or fears. Other outlets might reappear, such as thumb sucking and nose picking. However, these should not be causes for concern since the children will soon no longer need these outlets.

Charles spoke next, making one very simple, heartfelt request for of parents: “Please enjoy your child. They grow up quickly. To them, everything is wonderful. Let them enjoy their milestones.”

After these talks, the floor was opened to questions. Lloyd and Charles were joined by Karen Robinette, head teacher in West PM; Beverly Hartman, head teacher in East AM and lecturer in Stanford’s psychology department; Nandini Bhattacharya, teacher in West AM; Peckie Peters, head teacher in West AM and former special education teacher; and Jennifer Winters, Bing’s assistant director and a lecturer in Stanford’s psychology department.

**Q** Should I hold back my kindergarten eligible child with a fall birthday or send him/her to kindergarten?

“While a fall birthday alone is not sufficient reason to say a child is not ready,” advised Charles. Even if a child’s birthday is close to the district’s December 2 cutoff date, there are many other signs of youngness that need to be taken into consideration. Charles encouraged parents to talk to their preschool teacher about their child’s kindergarten readiness and to believe what they hear. She urged parents to discuss the pros and cons of holding a child back from kindergarten and consider other options. For example, a child could spend multiple years in kindergarten if the parents feel the child is not ready to move on.

**Q** What is kindergarten readiness and how can I prepare my child for kindergarten?

Charles emphasized the necessity of prior group experiences and the ability to pay attention in large and small group settings. Robinette replied that children should be able to appropriately use materials, such as paints and scissors. Problem solving and similar social skills are also important. [For more information, see article on page 33.]

Charles also cautioned parents against the current trend to push more and more expectations upon children. She said that children do not have to be reading to go to kindergarten—because kindergarten, not nursery school or preschool, is about numbers and letters.

While in kindergarten, parents can further help their children by giving children down time. “Kindergarten is very hard work for children,” explained Charles. “For the first time, they’re working on someone else’s schedule.” It is important not to exhaust children. Bhattacharya—continued in third column on page 33
How Play-Based Nursery Schools Prepare Children for Kindergarten

By Karen Robinette, Head Teacher

Though it comes as a surprise to some, a play-based nursery school such as Bing prepares children for any type of kindergarten, even the most academically challenging. This question arose this year, as it often does, at Bing’s annual Kindergarten Information Night.

At Bing, children play and learn in an environment prepared carefully by their teachers to include age-appropriate, open-ended activities and materials. The setting encourages children to explore their options and pursue their interests. Opportunities to repeat experiences enable children to gain in skill and knowledge over time. They learn to work independently and are free to find work (play) that is satisfying.

The deep engagement children have with their play develops thinking, language, and physical skills and promotes emotional well-being. It lays the foundation for developing the child’s disposition to learn as well as to find learning rewarding, stimulating and intrinsically motivating.

Perhaps the most elemental aspect of this preparation is learning how to function outside of the home in “group life.” After nursery school at Bing, children will have had many opportunities to practice important skills that accompany group life. These include the abilities to:

- Separate from parents and caregivers
- Self regulate (for example, toilet self, dress self, calm self, etc)
- Verbally express ideas and needs
- Resolve conflicts appropriately
- Follow simple directions
- Take turns

Each day at Bing Nursery School offers time for children to pursue their interests. But every day also includes many predictable routines and sequences such as the entry routine (selecting a nametag, putting belongings in a cubby and washing hands), snack time and the large group story time. Snack time provides children with a regular opportunity to interact in a small group setting. Small groups also form around other activities such as woodworking, block building, sand play or art activities. These types of activities enable children to listen to others and begin to take another’s perspective. These are important skills to master for working with others in any setting.

While playing and working on projects at Bing, children come into contact regularly with many of the materials and tools they will encounter in kindergarten. Their experiences at Bing with blocks, clay, paint, paintbrushes, paper, pencils, sand, scissors and water allow them to enter kindergarten prepared to use these materials and ready to further refine their techniques. Their experiences with these basic materials also promote the child’s creative expression, providing insight into the child’s thinking.

In our outdoor classroom environments, children have ample opportunities to develop their large muscle skills. It is important for young children to spend time in activities such as running, jumping, galloping, climbing, digging, balancing, and using balls, hoops, and other gross motor equipment. These activities promote coordination, balance, and muscle tone and are necessary precursors to the more specific fine muscle movements required to use materials and tools, for example, paper, pencils and scissors. We are fortunate, at Bing, to have half-acre play yards for the purpose of large muscle development.

At the end of the day at Bing, the large group convenes at story time to share songs and stories and to recap the day’s events. This large group experience requires that children learn to focus their attention on the teacher or participant(s). In this setting, children learn the skill of delaying gratification as they wait for an appropriate time to take a turn to talk.

The nursery school years are highly important in a child’s development. These early years encompass several milestones that are easily overlooked when the focus shifts to “pre-kindergarten.” Just as first grade is not “pre-second grade” neither should the important developmental skills of nursery school be overshadowed by the upcoming skills appropriate to kindergarten-age children. Our experiences tell us that children from Bing make successful transitions to kindergarten after having this supportive, play-based, child-centered curriculum.

Editor’s note: We would like to reassure parents that Bing Nursery School prepares children for reading and writing. The program offers ample opportunities to integrate language and literacy activities with play, for example, taking orders at a pretend restaurant or making a sign for roads built with blocks. Writing materials such as paper and pencils are available throughout the environment—both inside and outside. Children often dictate their ideas and stories to adults. [See page 16 for a classroom project on storytelling and page 18 for how children practice different roles through dramatic play.]

“Fostering Literacy,” one of the Bing parent seminars this year, addresses the many facets involved in young children’s emerging literacy. [See page 10 for a synopsis of the presentation. For reprints of full-length coverage of the seminar, contact the Bing office.]

—continued from page 32

How do I choose which kindergarten is best for my child?

Panelists replied that this is more often a matter of choosing a kindergarten that the parent can work with. Parents need to decide whether the school’s approach and philosophy is one with which they agree. Charles added, “If it feels comfortable to you, that’s your family’s framework and that’s what will probably feel comfortable for your child.” Moreover, parents need to remember that when working with the kindergarten, they do have power. If parents feel strongly about something, such as too much homework, they should speak up. It is important for parents to choose a school they feel comfortable interacting with in this way.
Drum Beats of Asia
Free Family Performance

A special free family concert featuring the Drum and Dance Ensemble of the Thailand College of Dramatic Arts was held on February 21 at Dinkelspiel Auditorium as part of the annual Pan-Asian Music Festival at Stanford University. Jindong Cai, Bing parent and the music director and conductor of the Stanford Symphony Orchestra, organized the special performance for children and families. Helen and Peter Bing generously sponsored the event. Many current and alumni Bing families attended the concert, which was also open to the public. Several drummers visited Bing School during the day for a preview of the concert. Inset photo: Helen Bing, right, with Cai’s wife, Sheila Melvin, and their daughter Cecilia Cai.

Bing Tour for CAEYC Conference

In March, Bing Nursery School was one of the early childhood education programs on the California Association for the Education of Young Children conference demonstration tour. More than 40 administrators and teachers attended the tour at Bing. CAEYC has a membership of 9,500. The conference attracted 4,200 early childhood professionals.

Bing Children’s Fair and Alumni Breakfast
Our Spring Community Event

Special thanks to co-chairs Jennie Bernheim and Jill Malott and all the volunteers for a successful fair on May 20, 2007. Left: The Stanford Band and Dollies perform to a large crowd. Above: Shri, ’94, second from left, and her parents Vikram and Veena Vyas with Bing teacher Parul Chandra, left, at the alumni breakfast preceding the fair. Shri is a freshman at the University of California in Berkeley.
The Harvest Moon Auction fell on the eve of October 28, 2006, making it a true Harvest Moon. This year, the Arrillaga Center for Sports and Recreation was festooned with pumpkins, fall leaves, and colorful balloons for the 18th annual celebration. The auction benefits the Bing Nursery School Scholarship Fund, this year raising a substantial $250,000.

Bing is one of the few nursery schools in the country that offers a scholarship program. We provide financial aid to more than 20 percent of our families. The scholarship program is an important part of the mission of the school and it enriches the experience for everyone at Bing.

As in previous years, the Arrillaga center provided ample room for auctioning off more than 1,000 items. The main stage was bursting with colorful hand-painted pumpkins. Jan Wahl (a local movie critic for KRON and the owner of many colorful hats) was this year’s auctioneer and she did an incredible job helping people empty their pockets during the live auction.

Some of the exciting live auction items were lunch with President Hennessy; a birthday party put on by Bing teachers Nandini Bhattachariya and Peckie Peters; a week at Big Sky Ski resort; KRON-TV tour and lunch with Jan Wahl; gourmet meals for a month; a Bing Children’s Playhouse; Tiger Woods Memorabilia Lunch; football throwing with Steve Young; a weekend in Las Vegas; a weekend at the romantic and architecturally amazing Post Ranch Inn and the perfect 2000 Chateau Latour! Raising $250,000 in one evening is by no means an easy feat. First, we owe a tremendous thank you to Helen and Peter Bing who generously donated a $50,000 gift. We also thank all of the hard-working volunteers who spent countless hours soliciting auction donations, picking up items, tracking and packing items, moving the inventory, assembling gift baskets, corresponding with donors, putting together the entertainment, setting up the venue, checking guests in and out, monitoring finances and tickets—and of course, cleaning up.

We really want to give a big round of applause to our Harvest Moon Auction Chairs, Dale Race-Hampton and Laurie Quinn for doing such an outstanding job organizing this incredibly successful event.

We also extend our sincere thanks and appreciation to all who donated, volunteered, attended, and participated and we look forward to seeing everyone at next year’s auction, “Moon Over Paradise” on November 17, 2007.

2006-2007 Annual Fund Report

Thanks to the contributions of Bing parents, friends and our staff members, we met our goal of $250,000 to help support our annual budget. In addition, we received gifts exceeding $300,000 to add to our Bing Nursery School Endowment. We’re deeply grateful for this generous support. We would like to extend a warm round of thanks to the parent fundraising chairs Jennie and Doug Bernheim, Linda Yates and Paul Holland, Kathy and Chad Hurley and their committee members for their efforts and support. In 2006-2007, the participation of our current Bing families reached 66 percent. In 2007-2008, we are striving for 100 percent participation!

The annual fund is an important part of the school budget. We depend on this fund to support staff development, additional assistant teachers in each classroom, specialists 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.
19th Annual Harvest Moon Auction
MOON OVER PARADISE  BING NURSERY SCHOOL, STANFORD UNIVERSITY

Saturday, November 17 at 6:00 p.m. at the Frances C. Arrillaga Alumni Center

Celebrate the evening with tropical food, Mai Tais and exciting auction items – Wonderful Hawaiian Getaway, Children’s Playhouse, Birthday Party with Bing Teachers, Private Boat Cruise on the San Francisco Bay and much more! Flip flops optional.

All proceeds benefit our children:
The Bing Nursery School Scholarship and Enrichment Funds.

Mahalo!
Dale Race-Hampton and Katrien Burlinson,
2007 Harvest Moon Auction Co-chairs

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