“Pow! Bam!” says a four-year-old as he readily punches a “Bobo doll” after briefly viewing a short film clip showing other children energetically punching a similar inflated toy. These now famous episodes are part of a series of research studies conducted at Bing Nursery School in the 1960’s by professor Albert Bandura. The studies demonstrated the powerful negative effects of televised violence on children and the ease with which children model aggressive behavior. Bandura’s social learning theory provides the basis of an important part of our practice here at Bing — the use of positive language and examples as teachers help children adjust to group life and develop effective interpersonal skills. In addition, the hundreds of studies conducted at Bing throughout the years continue to contribute greatly to our qualitative and quantitative knowledge of children’s social and intellectual development, here at Bing and around the world.

Bing Nursery School Began as Stanford Village Nursery School
Bandura, currently the David Starr Jordan Professor of Psychology, along with distinguished colleagues at Stanford, received a grant in 1965 from the National Science Foundation to construct the school as a primary research laboratory and site for training and teaching Stanford undergraduates. To meet these academic requirements, an exemplary nursery school program was needed, and being part of a major research university provided the opportunity for an outstanding facility. The spacious new building, which opened at its present location in January 1966, included one-half acre play yards for each classroom and allows a total enrollment of 435 children, in morning or afternoon sessions. It replaced a former “temporary” site at Stanford Village in Menlo Park (originally an Army hospital during WWII and now a part of SRI International) where the psychology department had founded the school in 1949. A major gift from Dr. Peter Bing and his mother Anna Bing Arnold completed the funding for the new Bing Nursery School. Helen and Peter Bing have continued to support the school with a lead gift each year to our Scholarship Fund. Most recently a generous gift from Helen Bing helped restore our beautiful grounds and renovate the interior of the school after nearly forty years of constant use.

A Distinguished Teaching Staff Is a Top Priority at Bing Nursery School
A group of compassionate, highly qualified teachers are what first and foremost make Bing a success. Children, parents and Stanford students all learn from these gifted individuals, who work in carefully selected teams based on complementary skills and personalities. Our staff ranges from assistant teachers with bachelor’s degrees, many of whom are recent Stanford graduates who have taken the psychology classes that meet here at Bing, to teachers and head teachers with many years of experience and master’s degrees or doctorates. The director, assistant director and designated head teachers are also lecturers in the Department of Psychology. Our teachers are constantly learning by regularly attending and making presentations at national and international conferences. A graduate degree in the field of early education includes training in working with adults,

In This Issue

From the Director..................1
Distinguished Lecture ............3
Bing Beautification Project......5
Research .........................6
Guest Speakers ....................8
Classroom Curriculum ..........10
Staff Development ..............20
Conferences .....................23
Events and Information .......28
Children Learn Through Play at Bing Nursery School

Young children learn best by being actively involved in the educational process. They develop positive social skills and effective learning strategies under the guidance of teachers who provide an emotionally supportive environment and encourage children to think, explore and experiment. Children are good observers and natural researchers who respond well to open-ended questions and benefit from positive models and suggestions. They also learn from each other, and at Bing we purposely have mixed-age groupings to maximize these opportunities. Through basic materials, such as blocks, clay, easel paints, sand and water, children learn to express their ideas, clarify misconceptions and construct their own knowledge. When children pursue activities that are intrinsically interesting to them, they become engaged in problem solving and develop important cognitive skills. Every day at Bing we see children think and learn as they come up with their own creative and innovative solutions to “problems” that naturally occur as they pursue their interests. That’s our curriculum!

Bing Nursery School Is a Dynamic Setting

At Bing Nursery School children are the center of our universe! We have the pleasure of learning each day from children, students and parents and of sharing that knowledge with each other. Many parents of currently enrolled children are themselves Bing graduates. We are delighted to have a chance to see them as adults for whom the school has become a family tradition. Similarly, we are lucky to have such excellent Stanford students observing in the school and presenting projects in the classrooms as part of their coursework. The school also serves as a model for many professional visitors from around the world each year. We encourage our Stanford students to remember what impressed them about Bing and to become advocates for a suitable environment, sufficient space and appropriately compensated teachers in early education settings as they embark on their own careers. We are all fortunate to be part of this outstanding and lively laboratory school.

As the founding director of the school, Dr. Edith M. Dowley, said, this school was designed to say to children and adults: “Come on in. This school was built just for you!” We say, come on in to the 2004-2005 school year as we all learn and enjoy this time together.

Acknowledgements

Bing Nursery School would like to thank Christine VanDeVelde Luskin for writing the Bing Distinguished Lecture Series article. A writer, Luskin has been writing the lecture series articles since 2001. Luskin’s daughter, Roark, attended Bing from 1993 to 1995. Bing would also like to thank Lynne Varner for writing the Kindergarten Information Night article. An editorial writer for The Seattle Times, Varner was a Knight Fellow at Stanford University. Her son, Jackson, attended Bing in the 2003-2004 school year. Finally, Bing would like to thank Pamela Weiss and Heather Woods, Bing parents, for their assistance in copyediting. Weiss’ son, Zachary, attended Bing in 2003; her daughters, Zoe and Zeta, are currently enrolled at Bing. Woods’ daughter, Laurel, attended Bing in 2003.

I’m drawing a children’s fairground. This is a ferris wheel. Here’s the things it goes on. There’s the sun. By Ada F., age 2
Educating the Brain: Lessons from Brain Imaging
By Christine VanDeVelde Luskin, writer and Bing alumni parent

The human brain only weighs a couple of pounds in an adult, but this amazing device has the ability to think, to let us move physically in the world, to produce consciousness and to feel emotions. Nevertheless, sometimes there are pitfalls in the functioning of the brain, patterns that actually hinder us in doing what we need and want to do. How understanding brain function can help overcome these pitfalls of brain circuitry was the subject of an address by professor John D. E. Gabrieli, given on May 27, 2004, as part of the Bing Nursery School Distinguished Lecture Series.

A cognitive psychologist and neuroscientist, Professor Gabrieli was one of the first to use the new neuroimaging technologies to visualize the development of brain functions that underlie the growth of mental capacities in children. In his talk, “Educating the Brain: Lessons from Brain Imaging,” Gabrieli reviewed some of the recent studies that examine the neurosystems underlying reading in children and how variations in those systems can provide insight into such problems as dyslexia.

Children acquire language naturally through interacting with a parent and our brains are optimized through many years of evolution to do that. Those who study the development of language, seek to understand how children are so adept at understanding language. But reading is different. Reading is a challenge and in the world we live in, it is a portal to many other opportunities. Children must master reading in order to flourish.

While the brain has evolved to do many things in terms of thinking, language, and physical movement, one thing it has not evolved to do is read, noted Dr. Gabrieli. That’s because visual communication is only about two thousand years old in our world and that is insignificant in terms of brain evolution. Text has only been widely available for about five hundred years, since the invention of movable type. Our brains evolved to listen to people who speak to us and to speak to other people, but not to decode black-and-white strokes. “Reading is a brilliant and beautiful creation of our culture that our brains have to somehow get around to understanding,” said Gabrieli.

Dyslexia is an unexplained difficulty in reading that can’t be accounted for by poor vision, lack of opportunity. Depending on your definition, it occurs in up to five to ten percent of the population. As Gabrieli noted, “It’s unfortunately common for a child to experience some difficulty.”

Today, the methods of modern cognitive neuroscience are helping us to understand more about how a child learns to read and maybe understand more about why it’s difficult for some children. This, Gabrieli said, is enormously exciting. Optimally what researchers would like to be able to do is to measure the neurons and other children, and then we somehow have to discover how those sounds map onto the letters, syllables and words of text. These symbols are pregnant with sound, but those sounds have to be discovered. This is called “phonemic awareness,” the idea that these simple visual things carry sounds, and it’s through knowing those sounds that the meanings of words are discovered.

English is especially tricky, even compared to other languages, for understanding this relationship between the sight of words and the sounds of language. What psychologists call the “irregularity of English” poses an extra challenge because it places an extra demand on the child to learn all the exceptions of the language.

According to Dr. Gabrieli, over a hundred years of neurology tell us two areas of the brain are essential for the comprehension and production of speech — a frontal area, called Broca’s area, is important for the production of speech. A posterior area, called Wernicke’s area, is important for understanding what people are saying.

In a wide range of studies from many laboratories and in multiple nations, it has been shown that the biggest difference between good and bad readers is a difference in function in the area around Wernicke’s area. Researchers have found that in children and adults who were poor readers and had been diagnosed with dyslexia, there was no activation at all in that region as they thought about the sounds of printed letters. This has important implications because it means that, for the vast majority of children, a very big part of their reading difficulty is not visual, but auditory.

Further, it has been found that for
certain parts of auditory comprehension, for listening to the sounds of language, humans operate at an astoundingly high speed of information processing — in the thousands of a second range — to achieve comprehension. Researcher Paula Tallal had the idea that for some children who are poor readers, the root of their difficulty might be that they have trouble reading the text but that they have trouble with the sounds upon which you learn to read visual text. And the trouble with the sounds comes from difficulty in making rapid distinctions in the auditory speech stream.

Thus, there’s a domino effect. First, these children never hear the sounds quite right. But they don’t know that. They just hear what they hear and don’t know that other people are hearing, for example, “baa” and “daa” as distinct sounds. Tallal took children with language impairments, many of whom go on to be poor readers, and set up the following task. She played two tones — a high and a low, or a low and a high. The child was simply asked to say which tone came first. And then the time between the two tones was varied. When the range of time between the two tones got to about a third of a second, the children with language impairments could no longer tell which tone came first. An inability to make these very rapid distinctions could be very problematic in language where you have to constantly make 40-millisecond distinctions.

To understand this phenomenon, Dr. Gabrieli suggested that we think of what it feels like when we have a second or third language in which we’re not very fluent. It always seems as if people are speaking very quickly in that language. But they’re not speaking quickly, we’re just understanding really slowly.

It has also been found, both in adults and children, that there is a spot in the left frontal cortex of normal readers that was activated by the rapid sound. “It’s as if this part of the brain automatically turns on when it hears a rapid sound or gets recruited to deal with a rapidly changing sound,” noted Dr. Gabrieli. But in children who are poor readers, these areas in the brain are not responsive at all. It’s not that they don’t hear the sounds. But very well defined sounds are needed in order to map them onto printed text. If a child or adult is shaky on those sounds and has a hard time telling them apart, the visual reading that builds on that falls apart.

And there’s further evidence in adults for the idea that parts of the brain that do the fastest processing are at risk even when reading or language are not involved. In an NIH experiment, a series of lines was moved, then still, then moved. In a healthy adult, a part of the brain turned on when there was motion, turned off when the motion ceased, then turned on again when the motion began again. These areas of the brain are specialized for motion processing and vision, a part of the brain that’s very sensitive to movement. But when these series of black and white lines moved back and forth for adults who were poor readers, those parts of the brain didn’t turn on at all. The test subjects weren’t even looking at words, just lines moving back and forth. This research has led to the idea that some parts of our brain excel at doing things very fast, and those may not be optimal in individuals who struggle to read.

A similar study from the Psychology Department at Stanford found that the more activation you got in this part of the brain, the better the reader you were. So, Gabrieli said, there might be parts of our brain that are brilliant at being super fast, the information super-highways of the brain, that are essential for reading and these may be less well-tuned in children who go on to be poor readers.

The way we think of the difficulties in 80 percent of children who read poorly or who struggle to read, noted Gabrieli, is that they’re really just at the tail end of a normal distribution. Probably they don’t have anything that’s significantly different about their brain. They just happen to be at the end of the spectrum for functions like rapid auditory processing. There is also growing evidence that there’s a genetic link between reading difficulty and syndromes like attention deficit disorder. In fact, said Gabrieli, there’s almost no doubt that genetics are a part of the reading puzzle.

One of the reasons for studying the brain is to discover markers in infants or preschool children in order to intervene before failure. Poor readers are now overwhelmingly discovered only through failure. “We can predict I think better and better and better which is the child who will struggle to read, and not only spare them hopefully the difficulty of failure, but discover a difficulty that needs to be dealt with,” said Gabrieli.

He added, “We also have a suspicion that these children are bravely finding a way to read as best they can, and that strategy is not a good strategy, unfortunately. It doesn’t take them very far, and by the time this child is a grade behind where they should be, they’re not only not using the mechanisms in the brain that are optimal for reading, they’ve really worked hard to learn an alternate strategy that goes so far but then collapses. Then you have to simultaneously encourage them on a fruitful path to reading, but get them to stop using a reading method that they’ve been doing day in and day out for years. And we all know there’s nothing harder to get rid of than a habit we engage in every day for hours.”

In one program aimed at helping poor readers, researchers attempted to improve rapid auditory processing, so that a child could better appreciate sounds and then more easily map them onto words. They found that, as a result of improving auditory processing, the children became somewhat better readers — commensurate with a gain in activation in that part of the brain that seems to be related to the growth of reading ability.

“So we’re actually extremely optimistic that for many, many children the right kinds of interventions will actually be very potent and let them, if not become wonderful readers, be plenty good enough to do what they need to do and succeed where their strengths will allow them to flourish,” said Gabrieli.
That said, Gabrieli noted that, in no case, is brain imaging yet at a point where it’s a better diagnostic tool than analysis of behavior or standardized testing. Where are things going? To early investigations of biological markers and genetics that permit prediction of who will go on to struggle and allow experts to intervene in a positive and aggressive way, before the trouble arises through failure.

“The science will move fast,” concluded Gabrieli. “Translating that into public policy, however, will be an uphill climb, as things usually are when contemplated on the large scale of education.”

Dr. Gabrieli received his B.A. from Yale and his Ph.D. in Behavioral Neurosciences from MIT. He joined the Department of Psychology faculty at Stanford in 1991 and is considered one of the university's most productive and visible young scientists and one of the world's leading researchers using the new neuroimaging technologies such as Functional Magnetic Resonance Imaging. His work has won him an Early Career Award in Neuropsychology from the American Psychological Association.

---

The Bing Beautification Project continues this year as part of a gift from Helen and Peter Bing. This year the office spaces, the kitchen, the multi-purpose room and the research game rooms were all renovated. Many thanks to Helen and Peter Bing for making this possible and to Michelle Olmstead, Bing alumni parent and interior architect whose design expertise was instrumental in this major project.

---

Photo not available online.

Photo not available online.

Photo not available online.
Research at Bing 2003-2004
By Chia-wa Yeh, Research Coordinator and Teacher

Do children recognize “mice” as the correct plural form for “mouse” but still say “mouses”? Do Asian-American children prefer calmness over excitement more often than their European-American peers? Answers to these and other intriguing questions are the focus of recently completed and ongoing research studies conducted at Bing Nursery School in the past year.

As the laboratory school for the Department of Psychology at Stanford University, Bing serves as a research facility for studies in child development. The facility including its five research rooms in the atriums is specifically designed for child studies, many of which are presented in a game-like format.

Research conducted at Bing since its inception nearly 40 years ago has made significant contributions to our understanding of child development. Early work includes the renowned delayed gratification studies by Walter Mischel in the ’60s and Albert Bandura’s work on observational learning in the ’60s and ’70s. Mark Lepper conducted experiments on intrinsic motivation in the ’70s. More recently, John Flavell studied the theory of mind and Eve Clark and Ellen Markman examined young children’s language acquisition.

Following are descriptions of current and recent studies in childhood cognition and language and number comprehension conducted during the 2003-2004 academic year:

Cognitive Development
In one study in the field of cognition, children are given cards and asked to sort them, first by one criterion (e.g. color) and then by another (e.g. shape). After the card sort “game” they are given a standardized pictorial language task, to measure whether children with more complex understanding of language more easily follow new rules. This research study, led by professor Natasha Kirkham, seeks to discern the role of language competency in children’s ability to flexibly adapt to changing rules. Other factors to be examined are inhibitory control and metacognition.

A second study uses a guessing game to discover how effectively young children ask questions to solve problems. In the preliminary study, by doctoral student Michelle Chouinard, children are shown two objects and told that one of the objects will be hidden in a box. Children then ask questions to gather information about the object in the box. This research examines what type[s] of questions children generate for problem-solving. A follow-up study looks at whether children incorporate information received based on their own request more readily than information given to them unbidden.

A third study asks: At what age do children begin to understand that the human mind may form impressions and beliefs that differ from reality? For example, a sponge may be painted to look like a rock but it’s still a sponge. A dissertation by doctoral student Mikkel Hansen investigates the role discourse plays in distinguishing appearances and false beliefs from reality; he seeks to find out if the phrase “looks like” helps children make the distinction between reality and appearance and communicate such distinctions to others.

A related study, by professor Ellen Markman and doctoral student Max Abelev, on the stability and change of object identity, poses the question: If a lemon were painted orange and thus looked like an orange, would it produce lemonade or orange juice? This study examines whether three-year-olds and four-year-olds think (or believe) an animal or object maintains the same properties after its appearance changes.

In the first of two studies on how children generalize information, children are shown a book with pictures of a character looking for an object, a shirt, and then finding it and talking about it. When later shown an array of shirts and asked to choose which one the character in the story liked, it’s hypothesized that most children would choose a shirt similar to the one shown earlier. The study by Markman and doctoral student Rebecca Williamson seeks to see if children generalize information about other people’s preferences more narrowly than when learning words as labels.

In the second study of how children generalize, they are given a generically phrased piece of information about an object shown in a picture and subsequently asked whether other objects also possess the same property (e.g. “This is a fish. They stay under water to breathe.” “Does this dolphin also stay under water to breathe?”). This study, by Markman and doctoral student Andrei Cimpian, looks at how children take information learned in one context and apply it to other situations.

Another research project by Markman and Williamson on how precisely children imitate a model when learning to perform a new action hypothesizes that when the reason for an action is clear, children may deviate from the exact behavior they see and use their own means to complete the goal. However, if children do not know the reason for an action, it is thought they will try to imitate the modeled action as faithfully as possible.

Language Development
Puppets are part of the act in a series of language studies by professor Michael Ramscar on the comprehension and pro-

Photo not available online.
duction of plural forms of regular and irregular nouns (rat and rats vis-à-vis mouse and mice). For the comprehension portion of the study, children choose the “correct” puppet between two hand puppets, one using the over-regularized (mouses) and the other using the irregular form (mice). For the production task, children teach puppets a range of words, thus prompting the children to produce singular and plural forms of both regular and irregular nouns.

A study by Ramscar and graduate student Eli Blatt looks at cross-cultural comparisons of English and Indonesian speakers in terms of their ability to discern similarities between actions. The two languages differ significantly as to inflection of verbs to indicate the state of an action. The English language verbs offer a variety of states of an action such as to happen, is happening, just happened and has happened whereas the Indonesian language places more emphasis on the agent performing the action. The hypothesis of the study is that English-speaking children will perform better at discerning state of action than their Indonesian counterparts due to the nature of each language.

In a study by Ramscar and doctoral student Asha Smith to compare language learning strategies in children and adults, both children and adults are taught unfamiliar names using pictures in three categories: familiar objects with existing English names, novel objects without English names and objects with more ambiguous descriptions.

Another study by Markman and Cimpian seeks to determine how significant a role shape plays in learning object labels. Previous studies showed that children tend to extend new words to objects that share the same shape, particularly simple shapes. This tendency has been dubbed the “shape bias.” The new study tests the hypothesis that even young children understand that labels refer to objects of the same kind, regardless of shape similarity or perceptual similarity in general.

An honor’s thesis by senior Lynnea Mills explores young children’s understanding and use of emotional-psychological verbs such as “like” and “love” in relation to animate and inanimate objects, in particular looking at whether children tend to use “love” to describe animate rather than inanimate objects.

Number Comprehension
Two studies look at children’s number comprehension. One of them, by professor EC Clark and doctoral student Tanya Nikitin, focuses on very young children’s concepts of “one” versus “more than one” as well as their linguistic expression of singular versus plural forms. The researchers use specially designed books containing pictures of one animal and a multiple number of the same animal on opposite pages. The children are ages 23 months to 39 months.

The other study, by professor Susan Johnson and doctoral student Jennifer Wagner, looks at young children’s visual-spatial competency in approximating numbers. Children are shown two pictures with dots (side-by-side and at the same time) and asked if the pictures have the same number of dots or which picture is closer to a given number. The results will be compared with adults with Williams Syndrome, who have been shown to have very good language skills but poor visual-spatial abilities.

Following are more research studies focusing on feelings, first drawings, food choice and features on the newest robotic toys:

Cultural Differences
As part of a larger study by professor Jeanne Tsaï’s culture and emotion lab, an honor’s thesis by senior Jennifer Louie compares differences in preferred emotional states between European-American and Chinese-American children. It investigates whether age, culture and gender differences in affect valuation are apparent in young children. In the study children are invited to draw faces that show different emotions. The researchers also present children with pictures showing activities that elicit calm versus excited emotional affect and ask the children about their own preferences.

Drawing
Recent research by professor Daniel Schwartz and doctoral student Amanda Mathias looks at the development of children’s drawing, observing the progressions in their art including children’s self-portraits, family pictures and pictures of animals. The study hypothesizes that children gradually change to drawing in conventional ways with corresponding body parts, beginning with their drawings of animals, then family members and finally in drawings of the children themselves.

Food Choice
Improving children’s food choices is the goal of another study conducted by Markman and Johnson. Their food choice research project aims to help children understand the compositional nature of food, the food pyramid and food groups, and ultimately help them think about food preferences.

Technology
Robotic toy technology has become increasingly nuanced. What role might these robotic toys play in young children’s lives? Two studies from the School of Education explore this domain. One of them, by professor Deanne Perez-Granados and doctoral student Sandra Okita, looks at how young children interact with robotic toys with varying degrees of animacy and anthropomorphic features. Providing children with robotic toys with increasing level of contingency and response, the research project examines which objects the children view as animate or inanimate. The second study, by Schwartz and Okita, focuses on children’s and adults’ perceptions and interpretations of intelligence in robotic toys with varying levels of response and animal-like features.

A tractor.
By Ben S., age 2
“It’s not what you tell your children, it’s how often you say it.”  
A Look at Language Acquisition with Michael Ramscar  
By Michelle Kellebrew, Teacher

One of the hardest questions to answer in accounting for how children learn language is how they recover from childhood grammatical mistakes, for example, saying “goed” for went or “mouses” for mice. Parents may be familiar with the experience of correcting such errors only to see them resurface hours or perhaps minutes later. Problems like these have led many researchers to conclude that important parts of language are not learned but genetically based and that recovering from such errors relies on the timing of an innate blueprint.

Not so, says Michael Ramscar, PhD. Ramscar, an assistant professor of cognitive psychology at Stanford University, trained in philosophy at Kings College, London, completed a graduate degree in computer science and earned a doctorate in cognitive science from the University of Edinburgh. He explained his theory on children’s language acquisition at Bing on Set-up Day in September 2003.

Ramscar takes a computational approach to these problems, trying to figure out how the software of the brain solves them. “This point of view offers an intriguing yet simple explanation,” says Ramscar. “The story starts with a fundamental law of human learning — no gain without pain.” To put this in scientific terms, human learning follows a power law. The gain that results from practice decreases as our expertise increases. In other words, when we start out learning something, we get high rewards from each lesson, but as we become more and more expert, we may find ourselves having to practice to stay right where we are. This simple law, says Ramscar, characterizes an enormous range of human learning from the strengthening of synaptic connections in the brain to playing the piano. For example, think of your first piano lessons and the rapid progress you initially made. Over time, the progress from each successive lesson diminishes until finally — when you get to the level of a concert pianist — it takes constant practice to simply stay in place. According to Ramscar, all human learning is like this.

Given that learning depends on trials, not time, Ramscar has been exploring the idea that childhood grammatical errors arise when children learn different grammar rules at different rates. “A child is exposed all the time to the regular aspects of grammar, whereas their exposure to a lot of irregular forms is comparatively much less frequent,” he says. What this means is that a child will get a lot of practice at regular forms of grammar and become an expert at them, while still being a novice at irregular forms. A child might say “mouses” instead of “mice.” Perhaps the child believes the plural really is “mouses.” Or perhaps the child has heard that the plural is “mice,” but this knowledge is drowned out by the more frequently learned regular rules, in this case, the over-learned temptation to add an “s” to mark plurality.

This last idea offers an intriguing hypothesis to test, says Ramscar.

At this point, “comes the hard and important part for parents and scientists to understand,” he says. To put the hypothesis simply, saying “mouses” leads surprisingly but inevitably to increasing the likelihood that the next time the child will produce the correct response “mice.” Repeated articulation of “mouses” eventually leads to “mice” because the little-used and correct pathway gets activated each time.

“From the point of view of the brain, any activation on a representation that is not over-learned will lead to learning,” Ramscar says. Therefore, whether or not the child actually does say “mice” depends on how many previous experiences he/she has had trying to say the plural form of “mouse.”

What can parents and educators do to further aid children in mastering this grammatical process? Ramscar states there are several things. First and foremost, encourage them to talk. The more experiences they have with the spoken word, the more likely they are to master it. When the child does make a grammatical error, be careful in your correction. Correct by being a good role model and repeating the word in its correct form. For example, if the child says, “Look at the three mouses,” reply with the correct form, “Yes, there are three mice in that picture,” rather than pointing out the error. Lastly, Ramscar says to have faith in the process — with each exposure the child will gain information and eventually master it.
A Day With David Macaulay
By Beth Wise, Music Specialist and Head Teacher

Last October, Helen Bing hosted award-winning author and illustrator David Macaulay to spend a day at Bing Nursery School. His well-known and well-loved books have garnered many awards including the prized Caldecott Medal. Macaulay’s Angelo provided inspiration for the Italian theme of our well-attended and successful Harvest Moon Auction held in November 2003.

During his daylong visit at Bing, Macaulay met with staff, visited the classrooms and in the evening gave a presentation to families. He spent time in each classroom; he worked at the writing tables using the same basic materials available to the children. Interested children gathered around him, fascinated, as he casually talked about his books while he drew, cut and assembled small shapes along with the children. Thomas, a child in West room, worked side-by-side with artist Macaulay as together they drew a door to a castle. The experience stayed with the child: He recalled months later, “I remember when David Macaulay came. We made a castle picture. It had those doors that open and close. I like drawing things, too,” said Thomas.

In Macaulay’s meetings with the teaching staff, he described his early childhood in England and how his family’s daily life provided the creativity, hard work and self-direction, which are so evidenced in Macaulay’s detailed and intriguing books.

“We lived in a small house with no TV and I grew up surrounded by things being made, often, and out of necessity,” Macaulay remembered. “There was a process and creation that I observed whether my dad was making something out of wood or my mother was making clothes. I understood that things were made in a particular way out of common materials and if you’re going to make it, make it right! I was either lost in my own imagination or outside making things.”

Macaulay shared observations about the Bing environment with the staff. “When I came here,” he said, “I saw that the ceilings are 20-feet high … and when you go outside, there is an irrelevant distinction between inside space and outside space and that is amazing. The transitions are so soft and there is a wonderful fluidity that is magnificent. It must make these children extremely comfortable because they do seem very comfortable.”

Macaulay was delighted to see the use of basic materials that both stimulate children’s creativity and provide an open-ended medium for self-expression. The chance to work with simple materials like pencils, manila paper, scissors, tape and glue inspires children to invent, express ideas, and also revisit their work to improve and modify it.

Macaulay agreed with the Bing approach and said that it is truly a gift for children to have time and basic materials available for creativity, discovery and invention. His own creative process was influenced by repetition and the desire to understand internally, for himself. He said, “I write for myself. I write because I get interested in an idea, interested in a concept. I get really curious and want to learn as much as possible. Part of the way I learn is by drawing. I draw until I understand it. If I can’t draw it, it means that I can’t understand it yet, so I do it again.” The staff acknowledged that same principle applies as our children practice basic skills at the writing table and do this repeatedly over time gaining mastery and understanding.

Macaulay admits he doesn’t write specifically for children, yet they are drawn to his books. “What includes children is the strong visual component of my drawings. Since I learn through drawing, I also teach through drawing. Although there is an educational reason for each of those images, there’s often a playful perspective or point of view … which makes the teaching more likely to get through.”

The day’s visit ended with a slide presentation for Bing children and their families. Macaulay shared many of his extraordinary illustrations as well as some drafts. The audience also got a sneak preview of his newest book Mosque. Many families stayed after the event to talk with Macaulay, informally sharing their appreciation for his work.

Macaulay signs a book for parents.
Things were flying in West AM during the winter quarter. It all began with a few children folding paper airplanes and building spaceships and then literally took off into an exploration of circuits, construction and flight.

Toward the end of fall quarter, we were surprised by unseasonably warm temperatures and sunny days, which drew children outside. Some were making butterfly wings out of found materials and floating them throughout the play yard. Others experimented to see if larger paper airplanes could fly farther than smaller ones. Interest prompted teachers to introduce “flying” books and materials into the environment. Wooden airplanes and helicopters were added to the block building area. Books on airplanes, birds, bugs, hot air balloons and space shuttles were displayed on the discovery table. A life-size photo of an airplane control panel was added to the patio to encourage dramatic play. Self-help materials were displayed to encourage children to build items with wings.

As teachers questioned children on their pre-existing knowledge about things that fly, there seemed to be a strong interest in airplanes, perhaps because most children had personal experience in this arena. Children shared stories about their airplane experiences, including whom they had seen, where they had traveled and any other interesting events that had taken place along the way. The patio area became the hub for children to act out these personal experiences. They took turns being pilots, flight attendants and passengers including some who periodically ejected from the plane with their parachutes in tow. One child commented that it would be easier if our paper control panel really worked and the next phase of our project emerged.

One teacher went with a small group of interested children to the library to generate a list of what a control panel would need. The list included everything from air conditioners, batteries, controls, levers, lights, steering gear, switches and wheels. Children indicated that they needed a reference book, to learn how to make a control panel, and, of course, they needed tape. The next step was to make a visual map containing all of these ideas. Children used large pieces of paper and drew the components as they wished them to appear on the control panel. This would then be transferred to a large surface of wood, which would serve as the actual control panel. Children estimated, measured and collaborated with each other to arrive at the dimensions they wanted.

Another teacher worked with a small group of children to figure out how they could make lights that would really work. Children experimented with battery packs, connectors and wires until they constructed components that could transmit electricity. They were surprised to find that the circuits could not only make lights work but that they could also generate the action needed to move a propeller or a helicopter!

At this point, children felt they were ready to construct. They measured the length of the boards they needed and gave these measurements to Wilhelm, our site carpenter. They realized they would need hinges to connect the pieces so the final product would be freestanding. The children used drills, screws and hinges with four holes to connect the panels. The team, comprised of three- and four-year-olds, both boys and girls, began by sanding the wood. They measured and drilled holes, using screws and screwdrivers to attach bridges that would connect boards. They used levels to make sure that everything was even — and they wore safety goggles to ensure that no one would get hurt. Finally, the control panel was ready for use and the play began.

Photo not available online.

Peter and Eliza use screwdrivers to join two pieces of wood for an airplane control panel.
The children in Center AM became keenly interested in houses last winter; they were eager to learn everything about them. It began with an interest in using the metal ladders on the red playhouse in the yard. Children talked about fixing, “tearing down” and rebuilding the playhouse. Some of the children in the class were seeing their own homes being remodeled and were talking about the on-going construction. Others were watching construction in the community. This topic was meaningful and in context with their everyday lives.

The group negotiated possibilities for the red playhouse. The consensus was to rebuild it with wings. Children investigated, researched and documented their ideas. They drew blueprints of what the house would look like with and without wings. It was the start of a major project, initiated by the children.

The goal was intrinsically interesting to the children. They were achieving some of their goals with their own actions. They were eager to do “real work” with their construction tools. They used a variety of tools to build, fix and tear down structures they had built with blocks. Colored water and brushes were used to make the houses colorful and shiny. They reflected on their investigations through their own books made at the language table. As their expertise grew, they became more able observers.

Teachers began questioning the children about their understanding of houses. “What is a house?” “Who makes houses?” “Do all people live in the same kind of house?” The answers revealed the children’s past experiences with houses and their ability to recall and articulate information about these experiences. Many theories arose.

Adam: “It is an upstairs house. I have an attic. There is a hall, then you turn, and then there is the kitchen.”
Christina: “I share my deck with my brother Cameron. It is made of plastic and wood.”
Geoffrey: “If you have two bedrooms then you have two windows.”
Grace: “I live in a Mountain View house. I live close to my mom’s bed.”
Sawyer: “I live in a two-story house. That means you have an upstairs and a downstairs.”

Children represented their ideas using different materials: blocks, cardboard, clay, paper and pencil, wood. The class investigated the topic in more depth by bringing in books, both fiction and non-fiction, related to building and tools. These included books about houses around the world and types of houses seen in the neighborhood. Their research provided opportunities for language exploration and building vocabulary as well. By coordinating firsthand experiences with the information in books, children gained knowledge.

As the children’s interest intensified, we invited Warren Packard, Justin and Tyler’s dad, to share his expertise and knowledge about houses. The children generated questions, practiced listening skills and shared ideas and personal experiences. Warren Packard and the children built a model of a house. He broke the task down into simple stages and provided vocabulary to describe the parts of the house. Children learned words such as foundation, insulation, plumbing, sheet rock and wiring. The children used this meaningful information in their work with other house building projects. Warren Packard also showed the class a power hammer and power saw and presented a slideshow of a house renovation. Jasmine’s mom, Laura Donohue, showed a dollhouse that Jasmine built with her family. Jasmine and her mom described the house building process in stages. Children saw the makings of a house up close and shared a group experience.

To further these investigations, children visited a construction site on campus in small groups. They had the opportunity to talk with the construction workers on-site and ask questions. Later, they brought back information to share with their peers at story time. Visits to the site were continued throughout the stages of the building process.

As a culminating piece of work, the children created a large house out of cardboard. They reflected upon and revisited their prior experiences to aid them in the building of their house. Their cooperative learning — debating, negotiating ideas, refining language and reinforcing the feeling of community — was a meaningful experience for the children. They also enjoyed being the protagonists, being able to walk right into their creation. Teachers felt rewarded to see the children truly engaged in learning and to see collaborative problem-solving, peer teaching, researching and sharing.

As growth continued in their understanding of this topic, children became fascinated by the red-tailed hawks in the yard. Watching them build their nests sparked the children’s interest in building homes for the birds, with natural materials found in the environment. This project provided a common focus for children and parents and teachers. Everyone came together for the purpose of helping the children in their investigations and supporting the growth of the children’s skills, knowledge and disposition toward learning.

The children were encouraged to take the leadership role in determining the direction of the project in order to create an environment where children were eager to learn. The interest in birds and their nests became an exciting extension of the house project, where the children’s learning was self-initiated and in context.

September 2004
The Games Project
By Nancy Howe, Head Teacher

Playing games is an integral part of Bing’s early childhood program. Teachers seamlessly weave games into all areas of the curriculum.

At snack time, teachers engage small groups of children in playing guessing games by focusing on familiar things: their names, the clothes they are wearing, animals, colors and so on. During music time, children participate in circle games that use movement, repetition and rhythm such as “London Bridge,” “Ring Around the Rosie” and “The Farmer in the Dell.” At story time, children come together as a large group for action rhymes and finger plays. These games actively engage children in using their bodies, fingers and hands to act out rhymes that are repetitive and often accompanied by music.

Historically, games have played an important role in the development of young children. Originally, games were linked to survival, their focus to promote agility, endurance, precision and strength in preparation for hunting. Later, games became entertaining diversions for children in an era long before television and videos. Traditional childhood games are passed down from one generation to the next. Most parents enjoy teaching their children the games they remember playing as children. Almost instinctively, parents bounce baby on their knee while reciting a familiar nursery rhyme or they play a simple game of peek-a-boo. Chase and hide-and-seek follow as toddlers become mobile. It is not until nursery school that most children have their first opportunity to play group games with their peers.

The Games Project
Games were the focus of an in-depth project in Center PM this year. The teachers first noticed the children’s interest in playing organized games during the fall quarter. It was the windup of the baseball season, and several of the older children were interested in sports. Some children already knew the rules of ball-oriented games such as baseball, basketball and football, and they looked forward to playing.

We decided to introduce the children to activities and games that emphasized skill development and mastery — competence rather than competition. We knew that the children naturally enjoyed jumping and that the sand area seemed a natural and safe place to practice and to see how far they could jump. One of the teachers introduced the children to a yardstick and showed them how to measure their distances. The children quickly embraced the concept of personal best, measuring and recording their “long jump” on a large chart.

In the winter, teachers helped the children construct a bowling alley on the patio, using large, hollow wooden blocks to mark the lanes. Bowling pins were made from clean, empty milk containers, recycled from snack time. The children took turns rolling balls and recording the number of pins they knocked over. They liked the idea of aiming at a target and other “aim games” followed, including a beanbag toss and Hula-Hoops as targets for paper airplanes. When winter rains kept the children on the patio, they played aerobics in a follow-the-leader style as well as musical chairs.

During spring quarter, our spacious play yard was an ideal setting for large group games: “A Tisket A Tasket,” “Duck Duck Goose,” “Hide-and-Seek,” “Red Light, Green Light,” parachute games, relay races, scavenger hunts, treasure hunts and an invented game the children called “Lava.” In addition, we were fortunate to have the expertise of Beth Wise, Bing music specialist and head teacher. She taught the children many traditional musical and circle games as well as original games incorporating dramatic play or musical accompaniment.

How Games Benefit Young Children
Simple, organized games provide young children with many cognitive benefits. Games help children develop an understanding of rules and goals, learn how to follow directions, learn strategies and
how to keep score, make decisions and think logically. They give children the opportunity to articulate to others “how to play.”

The children in our classroom have become quite skilled at describing the rules and goals for some of their favorite games:

**Basketball**
The ball goes in — and then comes out! — Lionel

**Duck Duck Goose**
You make a circle. Someone starts first and goes “Duck, Duck, Goose.” They pick a goose. Then the goose chases the duck. The goose becomes the duck.

Then the duck picks a goose. — Alice

**Hide-and-Seek**
The other person has to hide. People have to find them. — Amna

The seekers count. Then the seekers find the hiders. — Elizabeth

**Hopscotch**
You jump in the numbers. If you’re on a one, use one foot. If you’re on a two, use two feet. — Maggie

**Rules of Soccer**
You can’t use your hands. — Hannah Z.

You need special shoes called cleats.

— Maggie

They have bumps on them so you can run really fast. — Miller

Games inspire children to think creatively. Children inherently love playing games and often incorporate invented games naturally into their spontaneous play. In addition, the children in our classroom have enjoyed designing their own board games using spinners or dice and making up their own unique rules and goals for playing.

Games help children develop physical skills too. Children gain competency, a sense of accomplishment and mastery as they practice using large and small muscles effectively by hopping, jumping, running, skipping, aiming and hitting a target, throwing and catching.

Games are agents of socialization as children begin to feel included and learn to collaborate, cooperate and take turns; the children learn to cheer one another on, share in collective fun and work together as a team.

Games are largely non-verbal and therefore a great equalizer. Younger children, as well as children whose first language is not English, can participate successfully. Children in countries all around the world play variations of most games. The universality of games was recently demonstrated when one of our Center PM parents drew the Korean version of hopscotch alongside our American hopscotch!

**Games help children develop an understanding of rules and goals, learn how to follow directions, learn strategies and how to keep score, make decisions and think logically.**

**Adapting Games to Young Children**
Many traditional games are geared to older children and often include skills, rules, goals, strategies and a sense of competitiveness that can be quite challenging for younger children. As teachers, we have found ways to successfully adapt or modify games to include different developmental levels, interests, learning styles and physical skills.

For example, younger children can enjoy ball games such as baseball, basketball and soccer by practicing basic, beginning skills like hitting and kicking and throwing. Clipboards for turn-taking make the process of waiting a turn more organized and successful. Some games, like soccer, can be physically strenuous for three- to five-year-olds, so our focus has been on warm-up activities and stretching exercises, which the children take turns leading. They also like to practice stopping a ball rolled to them by a teacher and then kicking it back.

We know that young children like to dress-up and pretend, as they imitate what they see in the adult world. This need to role-play is evident in their games as well. Children enjoy making and using simple props to lend authenticity to their games. During sports-oriented games, they often like to choose a nickname, or write their name and number on their “uniform.” Several of the children even made their own baseball bats from rolled up paper to accompany a game of “imaginary baseball.” Without a ball, and using just their imaginations, the children batted, “hit the ball out of the park,” ran bases and also cheered one another on!

Sportsmanship is an acquired skill and can be difficult for three- to five-year-olds. We have found that children can be encouraged to “play by the rules” by inviting them to help make up the rules of a game. Writing them down validates the collaboration involved. If children have the opportunity to come up with rules they think are fair and appropriate for their stage of development, they will have a much easier time agreeing to them. As children become more familiar with a game, the rules can be renegotiated and adjusted accordingly.

**Playing Games at Home**
Games are a wonderful way for children and parents to spend valuable time together. Many games played at home are invented games that evolve naturally as part of the rhythm of the day: getting dressed in the morning, games to play in the car on the way to school, and quieter bedtime games. Others are determined by place or circumstance such as waiting games at the doctor’s office or in a restaurant or on an airplane.

Children also enjoy learning traditional games their parents may have played as children: card games, charades, chess, classic board games, jack's, jump rope,
Music and Dramatic Play
By Beth Wise, Music Specialist and Head Teacher

Re-enacting stories through music and dramatic play is an engaging way to include many children and promote collaboration. The children participate by

• acting out roles
• collaborating with peers
• creating and negotiating the script
• making props
• playing musical instruments
• singing.

In an adaptation of “The Three Little Pigs,” the children tried multiple roles; they acted and sang, moved about in space and interacted creatively and positively with their classmates.

Each child was given a guiro [a percussion instrument of Latin-American origin made of a serrated gourd and played by scraping a stick along its surface] and we discussed using the instrument in three different ways: tapping like a hammer, scraping across the grooves like a saw, and placing the mallet in the center and stirring it around like mixing cement. Then we listened to the sounds.

I explained that each time we would need to build a new house for one of the pigs, we would sing our song and use our instruments to help us build the house.

To the music of “The Carpenters,” a Puerto Rican folk song, we began moving throughout the yard to construct our houses.

“The carpenters are working, sawing the lumber
We love to watch them working, sawing the lumber
They go see, we go saw
They go see, we go saw
Until we’ve sawed the lumber
Finished at last!”

When a house was finished, the infamous wolf appeared!

Children in this age group typically want to act out a singular role. But it is important to include everyone. With this in mind, we had 10 pigs and 10 wolves to begin our game. Using the traditional words from the story, the children became skilled at voicing their parts and moving through the yard to find a new location to build each new house.

The final house of bricks was built in the red house on the hill. All the children sang together inside and the children outside peeped in.

To make sure that everyone felt included and part of the collaboration, I redesigned the ending of the game. I asked the wolves if they were trying to blow the house down because they needed a strong, solid house of their own. Without needing a cue, all “wolves” responded with an enthusiastic “Yes!” I pointed out that we had sturdy carpentry tools and could build a house for them, and the wolves said that they would love a house of their own.

With everyone gathering around the wolves, we sang our folk song, built a house for them and filled it with furniture, gifts and a cake. All together, we concluded our musical game with a feast and a party, which promoted a sense of camaraderie and play.

Noor and Elizabeth play Noor’s invented board game, “Spin the Flower.”

I’m going to make a game. My game is that I’m going to get flowers all red and purple. I’m going to make some cards. Every different color is for every different flower. I’m using nice colors. We just pick a color and see which color it is, then pick another. I’m going to make a long thing that spins and you go to the color it lands on. We’re going to use that for the spinner. If you want to play again, you can pick another card and go to another color. The game is called “Spin the Flower.”—Noor

A house with a plant in front of it.
By Nicholas T., age 4

As part of the Games project in Center PM, Beth Wise, Bing music specialist, worked with the children and created several dramatic play musical games such as The Billy Goats Gruff and The Three Little Pigs.
During our Fall 2003 Set-up Week, the staff of Bing Nursery School reviewed the various applications of using basic materials such as paint, blocks, water, clay and sand with young children. Jeanne Lepper, director of Bing Nursery School, presented the staff with a few small round wooden balls and encouraged the staff to have them available in the block area. Experimenting with these balls, the children in East PM found some unexpected ways of using them.

A few weeks into the fall quarter, Sarah Wright, head teacher in the East PM classroom, positioned a 10-foot-long plastic cylinder at the top of the hill in the play yard and placed a basket of balls nearby. The children’s natural inclination was to send balls through the tube and compare their speed as they rolled through the cylinder. Throughout the week, the children inventively added gutters and blocks, extending their explorations.

Two weeks later, the ball machine was revisited. One child, Nathaniel, was particularly instrumental in the process. He assembled the wooden balls and vinyl gutters on top of the hill. Other children, attracted to the collection of gutters, began to assist in the construction of a ball machine. These children quickly turned the gutters into a much more elaborate system.

Working together, the children began to collect materials from around the classroom. They used gutters from the sand area to transport the balls from the top to the bottom of the hill. The children also brought hollow wooden blocks from the patio area to elevate the gutters to create ramps. Along with the wooden balls, the children also used small and large Whiffle balls in the ball machine.

While some of the children stood at the top of the ball machine watching the balls roll down, others were interested in transporting the balls. Henry and Chet waited at the bottom of the hill to gather the balls, placing them in the lower portion of their shirts, which they had folded into pouches. Chet and Henry soon were carrying four or five balls each, transporting them for the other children.

Due to the simplicity and open-endedness of the materials used, the children began to alter the ball machine for different results. They manipulated the gutters and blocks to make the balls roll up, down, left and right.

This ball machine became the first of several versions that were built throughout the week. The first day the ball machine consisted of a cylinder, gutters and three types of balls. On the second day, Kieran described the ball machine as being “a roller coaster for balls.” The excitement continued throughout the week, but the third day brought an entirely new adventure.

The children in Center PM classroom had been noticing the ball machine in East. After some discussion between the children in the two classrooms, it was agreed that a ball machine connecting both classrooms would be built. The children in East collected more hollow blocks to boost up the gutter over the fence into Center. As this joint-classroom ball machine neared completion, Chet invited Julian, a child in Center, to be the first person to use this new ball machine. Julian placed the ball into the gutter as children from East and Center classrooms looked on with excitement. This new configuration extended the children’s collaboration beyond classroom boundaries and facilitated much communication between neighboring groups.

With the addition of the wooden balls and the ball machine, the children in East PM had a meaningful learning experience. They grew socially as they connected and shared ideas with children in their own room as well as with those in another room. Principles of physics were discovered as they manipulated the balls and ramps while constructing and deconstructing the ball machine. Their physical stamina was enhanced as they built the machine. The three-week experiment with balls and ramps was truly an example of the value of basic materials and how they can be deeply satisfying for young children.
Teachers in West PM had been watching and marveling at the children’s ideas and creations last fall. Each day, children were putting time and thought into their block-buildings and paintings, and they were planning and working together in teams in the sand area. Teachers wanted to make a record of these amazing moments, which happen in Bing classrooms every day. We decided to document the children’s ideas and creations and to make them the focal point of classroom activities. This decision in the end benefited everyone, the teachers, the parents and the children.

As teachers, we aimed to hone our observation skills and learn how to ask careful questions that extend children’s thinking. As Vygotskian scholars have argued, the practice of observing children closely and attempting to scaffold their learning process with careful questioning is a very delicate task for the teacher. One expert, C.A. Stone, aptly noted that scaffolding is a “subtle phenomenon.” It takes careful observation and great knowledge of a child’s developmental level and personality to know when and how to ask carefully worded and timely questions that lead a child to deeper thinking and greater discovery.

Teachers decided to closely observe, respond and document the children’s work. By taking the time to transcribe their language and narrate the process, teachers became better students of the children and learned more about each child. We used PowerPoint software on classroom computers to format and record notes and observations and experimented with different styles of presentation — including computer slideshows and paper printouts. As teachers, we became more observant, more careful and more creative.

Parents were delighted to see concrete evidence of their children’s endeavors, actual documentation of their creativity in action. Parents were shown examples of children expressing and articulating their own ideas, listening to others and solving problems together. We wanted parents to witness these important moments that happen throughout the day, and we hoped that parents would see and value the subtle benefits a child gains from participating in a child-centered, play-based learning environment like Bing.

Several moms mentioned that their husbands enjoyed getting a look at their children’s activities at school. One mom accepted a picture and detailed description of her twins working with number puzzles and remarked that in one page she could see her children playing with other children, using language effectively and displaying the ability to focus on an activity for an extended period of time. The children’s work served as a bridge between parents and teachers as together we marveled at children’s ideas and creativity.

Perhaps the greatest beneficiaries of our extended focus on the children’s work were the children themselves. With the teachers taking more time and effort to record children’s ideas, the children took more time with their creations. According to educational thinker Loris Malaguzzi, through documentation children “become even more curious, interested, and confident as they contemplate the meaning of what they have achieved.”

Each time a teacher wrote down a child’s words and showed genuine interest in a child’s work, that child understood that the ideas were worthwhile. This was reinforced when a child also saw examples of his peers’ ideas documented and displayed prominently in the classroom and on our computer slideshows. The documentation helped build community: Children were learning from each other and about each other. In a laboratory nursery school like Bing,

Photo not available online.

**Lizard House**


Sophia: “The lizards are inside and we have corn inside for the lizards to eat.”

Isaac [pointing]: “This is the gate that the people get out.”

Sophia: “The people get to see the lizards.”

Nicolas: “When it’s night time and they go outside and the gate opens.”

Sophia: “They go outside and have a wonderful time playing.”

Isaac: “Beep...beep...That beeping means they’re hungry. Know what that beeping means? That it’s dark and it’s closing.”

Photo not available online.
The Bing Times

parents and teachers likewise grow and learn from the children.

When meeting with parents in spring conferences to discuss their children’s growth, the documentation helped assess a child’s development and interests. “The Contribution of Documentation to the Quality of Early Childhood Education,” an article by Lilian Katz and Sylvia Chard, explains — “Of particular relevance to American educators, documentation provides information about children’s learning and progress that cannot be demonstrated by the formal standardized tests and checklists we commonly employ.”

The documentation project conducted by teachers this past school year will serve as a future reminder to the children and the parents in our classroom of their time at Bing. We all will be able to look back on the amazing creations and marvelous ideas the children expressed and imagine what they might think of next.

Samuel, Tanner, Addison, and Xander worked together to turn the train in the yard into a race car. “Turn Left. Oh no, a tree!” Addi exclaimed. After working together for a while, they played inside their creation. “We win!” Tanner said. Addi pointed, “Tanner, look! A tire broke!” Teacher asked, “Where are you going?” Sam replied, “To a twinder museum.”

They continued playing together. “Oh no, it’s raining!” Addi yelled. Xander pointed and said, “We’re missing one tire!” Addi added, “No, two tires!” Xander responded, “Yeah, we’re missing two tires, lots of tires, 1,2,3,4,5,6,7.”

Working together in a dramatic play scenario like this, these boys learn to share ideas, solve problems and work as a team toward a common goal that they created.

In Search of an Anklyosaurus

Cesar and Julian in Center PM were discussing what an Anklyosaurus looked like and wanted to draw one. A teacher suggested a trip to the library to find a book about dinosaurs. After locating and paging through Dinosaurs and Prehistoric Animals, the two boys found a picture of an Anklyosaurus. They returned to the classroom and set to work.

They propped open their book on dinosaurs and placed it by the easel. The boys studied the picture.

“That is shaped like an oval!” Cesar stated while pointing to the dinosaur’s body. He then began drawing a large oval shape.

“Those are like lots of little triangles!” Julian stated while pointing to the dinosaur’s back. He began drawing while exclaiming, “That’s so many triangles!” He then noticed the head was shaped like a circle and drew the dinosaur’s round head.

“Oh no! The tail won’t fit! It’s too long! We don’t have any more room!” lamented Cesar.

The teacher asked what they could do to make the tail fit on the paper and together they concluded that a curved tail would fit. After completing the drawing, they decided to paint it. The boys thought about what colors to use and chose green and yellow. The two carefully painted while continuing to talk about the dinosaur ….

The following day, the boys returned and asked if they could continue painting their Anklyosaurus. This caught the attention of some other children, who asked the boys if they would help them draw a dinosaur. Cesar and Julian agreed and drew an outline for the two younger boys and then returned to their own painting.

The interest continues … more to come.

Documented by Mary Munday, Teacher

In Search of an Anklyosaurus

Cesar and Julian in Center PM were discussing what an Anklyosaurus looked like and wanted to draw one. A teacher suggested a trip to the library to find a book about dinosaurs. After locating and paging through Dinosaurs and Prehistoric Animals, the two boys found a picture of an Anklyosaurus. They returned to the classroom and set to work.

They propped open their book on dinosaurs and placed it by the easel. The boys studied the picture.

“That is shaped like an oval!” Cesar stated while pointing to the dinosaur’s body. He then began drawing a large oval shape.

“Those are like lots of little triangles!” Julian stated while pointing to the dinosaur’s back. He began drawing while exclaiming, “That’s so many triangles!” He then noticed the head was shaped like a circle and drew the dinosaur’s round head.

“Oh no! The tail won’t fit! It’s too long! We don’t have any more room!” lamented Cesar.

The teacher asked what they could do to make the tail fit on the paper and together they concluded that a curved tail would fit. After completing the drawing, they decided to paint it. The boys thought about what colors to use and chose green and yellow. The two carefully painted while continuing to talk about the dinosaur ….

The following day, the boys returned and asked if they could continue painting their Anklyosaurus. This caught the attention of some other children, who asked the boys if they would help them draw a dinosaur. Cesar and Julian agreed and drew an outline for the two younger boys and then returned to their own painting.

The interest continues … more to come.

Documented by Mary Munday, Teacher
Relationships are the keystone of early childhood education. This year, the East AM teaching team considered the framework upon which our philosophy is based. As our team explored the critical importance of quality interactions, Ways of Caring emerged as our unifying theme. We delved into the many ways in which three elements — people, practice and program — interconnect to establish and support caring relationships that are the foundation of our community.

People
Children, parents and teachers enter into positive and productive relationships by creating a climate of trust that in turn facilitates learning. The adults in the program make the first move in the careful dance that occurs as teachers seek to become a person of trust for the child. It begins when the teachers meet with parents to learn about the rhythms of the family and the child’s cultural preparation for school. We then help the child perceive the start of a relationship between parent and teacher and feel comfortable in the transition to the new setting.

The adult relationship gives the child permission to enter into interactions with an unfamiliar adult. Often, the teacher is the child’s first friend at school and later serves as a link to other children. The parents’ confidence and good feelings about the program are transmitted to the child. A high degree of freedom of choice, freedom of movement and freedom to play come only after the child is free of worries and has had a successful transition to group life.

Ways of caring represents an open invitation for parents to participate at many levels.

Parents and relatives volunteer to help with basic materials and to lead special projects, sharing their own interests and work lives with the children in the classroom. Bing staff, students, volunteers and surrounding community members also donate their time and talents to the program.

In the 2003-2004 school year, parents contributed and participated in many ways such as: art projects, cooking, exploring a medical kit, giving a real baby a bath, language activities, presenting cultural traditions, reading to children and many informal interactions that show ways of caring. Our gardener Steve told us how to care for our new tree, and Peter, our entomologist, described the web of life in our natural setting. The fire fighters brought their truck and demonstrated their methods of taking care of people. It was an exciting hands-on experience to hold the hose and squirt the water! These visits increase understanding and enhance the children’s ability to use the Bing environment in dramatic play where they can try on these care-taking roles.

Practice
Teachers prepare the environment by presenting a clean and organized space with materials that are selected carefully for the children. The teachers “treat the children as honored guests,” putting into practice the philosophy encouraged by Edith Dowley, Bing Nursery School’s founding director.

Greeted at the door, the child is welcomed and invited to participate. This initial exchange each session makes it evident to the child that he or she is important as an individual and as a member of the group. It matters that he or she is present because the teacher has smiled, looked into the child’s eyes and said “hello.” The teacher is genuinely glad to see each child. Children learn their part in this tradition also. The child gives an offering for snack and he or she is acknowledged for generosity and sharing. These predictable routines set the tone for the rest of the day.

In addition the enthusiasm of the parents during the transition is noticed by the child and helps the child take the beginning risk of experimenting with materials. The natural rhythm between the parent and child helps the observing teacher learn how and when to support the separation. The caregiving responsibility is transferred from the parent to the teacher. Teachers initiate play and use of materials, eventually serving as a link to other children. Teachers listen and observe and anticipate ways that provide support in this adjustment. Teachers coach, demonstrate, make inquiries and serve as a resource and mentor for the child.

Psychologist Eleanor Maccoby states, “The counterweight to attachment is curiosity.” In a prepared environment, teachers select materials that encourage the child to participate and become engaged. Play themes and teacher-initiated activities attract children to enter into the learning process. The outdoor play yards and environment designed especial-
ly for young children encourage productive interactions and promote positive behaviors.

During the past year, the children’s mailboxes enriched the Ways of Caring theme, by providing a means to transmit messages of caring to one another and to bunny Chou-Chou, who has his own mailbox! In early March, children Lauryn J. and Julia realized the need to expand the system to include mailboxes for teachers; the children themselves prepared the teachers’ images and names for the boxes.

Program

Our theme of caring involves the “whole” child because our program addresses cognitive, communicative, emotional, physical and social development. Children grow cognitively by being able to understand the cause and effect of interactions and by beginning to problem-solve with people and negotiate the many elements of successful relationships.

Occasions to interact in trusting and respectful situations enable children to learn to communicate through listening and noticing and then signaling their expressions of caring. Emotional development is frequently demonstrated in interactions. In her book Caring, Nel Noddings writes, “The child has a special capacity for love. Long before the capacity for sustained reasoning develops, there is the capability of tenderness, of feeling, and reciprocation.” In the physical domain, children learn to position themselves or manipulate materials as a support to others, whether it is patting a chair to show an available seat, holding a string for a friend to cut or running to get a ball for a child just beginning to play. Through observation and exchanges, children gain in being able to read the social map.

Integrating these increasing developmental abilities happens naturally in the nursery school environment. It is not too soon for children to realize the power in their actions. In the words of Mister Rogers: “Deep within us — no matter who we are — there lives a feeling of wanting to be lovable, of wanting to be the kind of person that others like to be with. And the greatest thing that we can do is to let people know that they are loved and capable of loving.”

When asked “Who takes care of you?” children, not surprisingly, note the nurturing they receive from their families. When asked “Whom do you take care of?” the children respond with ideas about parents and siblings and friends; they even include our garden bunny Chou-Chou. When a child is angry, hurt or sad, the other children are quick to notice and observe the adults, as they respond.

Whether emotional or physical, we notice that children draw upon these models and their own experiences of being nurtured to eventually take action to offer help to others. Particularly in mixed-age groupings, children notice when they can assist or guide a less experienced child. Children need these opportunities to gain insight into the feelings of empathy and sympathy, altruism and compassion, generosity and kindness.

The theme of caring is rich with opportunity and deep in meaning for us as a community. The teachers in East AM draw upon a wealth of guidance from the leaders in our field. John Dewey encourages teachers, “When the school introduces and trains each child in society into membership within such a little community, saturating him with the spirit of service, and providing him with the instruments of effective self-direction, we shall have the deepest and best guaranty of a larger society which is worthy, lovely, and harmonious.”

In the past year, Ways of Caring took many forms in our classroom program, but all of them began and ended with relationships.

References:


Enter any classroom at Bing Nursery School and there are shelves upon shelves of wooden blocks — all kinds of blocks — unit blocks and hollow blocks — ready and waiting for children to come and build. Children spend hours constructing castles, forts, roadways and other elaborate structures. Blocks offer a wonderful medium for children’s play. But what do children gain as they work with blocks?

In “Build and Build: The Cognitive Benefits of Blocks,” Bing’s assistant director Jennifer Winters posed this question to teachers at the morning session of spring quarter’s staff development day. Having presented the topic with Bing director Jeanne Lepper at the annual conference of the National Association for the Education of Young Children (NAEYC) in Chicago in November, Winters revisited the subject with Bing teachers to inspire reflection on their interactions with children in the block area and to maximize their understanding of blocks as an important material for the classroom curriculum. The presentation included the history of blocks, the developmental stages of block building and cognitive growth facilitated by play with blocks.

- Children use blocks as a form of communication.
- Children gain self-awareness and social skills through joint projects in the block area.
- Children practice scientific thinking when as they classify, compare, inquire, interpret, observe, predict and test ideas with blocks.
- Children engage with math in the block area; they count, contemplate shape and form, and construct structures based on concise mathematical relations.
- Children partake in dramatic play, applying imagination to objects created with blocks and engaging in representations and reflections of their own experiences, fantasies and information.

Teachers reviewed their role as facilitators in the block area, discussing appropriate practices and reflecting on their responsibilities as teachers in the classroom at large.

Staff development day continued with a presentation by Heather Erba of the Stanford Psychiatry Neuroimaging Laboratory on her latest study on autism research and brain imaging. She discussed the mission of her research, relevant study findings and research procedures when conducting brain-imaging studies on young children. While Erba’s findings have yet to be analyzed, teachers were updated on the latest techniques and current work conducted outside of Bing’s research rooms.

The staff development sessions ended with presentations by each teaching team including classroom projects and new ideas for curriculum:

- The Two’s class teams updated the staff on the children’s ever-growing social, language and physical skills, as well as their latest interests and use of basic materials.
- The West AM team followed with a presentation on the use of woodworking in the classroom and the children’s responses.
- The West PM team presented their children’s interests in maps, including activities such as mapping the yard and new songs teachers had created in response to the children’s mapping.
- The Center AM team discussed their project on birds, sharing the story of how their project emerged from the presence of a red-tailed hawk and a robin’s nest in their yard.
- The Center PM team talked about their project on games, facilitating the growth of their classroom community and helping children make social connections and find new friends.
- The East AM team presented their project on caring for others, sharing a book of children’s ideas about caretakers and teaching the staff songs about caring for use in the classroom.
- Finally, the East PM team closed with their children’s keen interest in block building, focusing on the social aspects of blocks.

The Day the Chickens, Turkeys and Roosters Came to Bing

Photos not available online.

One morning in July, a 4-H group from Grass Valley, Calif., visited Bing, along with various poultry including chickens, roosters and turkeys. With the able help of the 4-H group members, learning stations were installed in Center, East and West classrooms to facilitate teaching the children at Bing about the care of the birds. The event was arranged by former Bing teacher Jackie Mertton. The children got to feed, hold, help wash and walk the poultry. It was a memorable experience for children and teachers alike.
Teachers and Technology — Winter Staff Development Day
By Jenny Ludlow, Teacher

In a recent discussion about silkworms, a child asked, “Do the worms ever get thirsty?” No one in the group knew the answer so the teacher asked, “How can we find out?” Four-year-old Tomás said, “Let’s ask Google.” So we turned to East PM’s classroom computer and spent the next 15 minutes looking at websites on silkworms. This is just one of the ways technological tools enhance our learning experiences at Bing.

Technology plays a major role in many professions and teaching is no exception. For example, each of our classrooms at Bing has a digital camera. Additionally, in November 2003, Linda Yates and Paul Holland, parents in East PM, generously donated an eMac equipped with iMovie, iPhoto, and iTunes as well as a combination copier, printer, scanner to each of the nursery classrooms. Their gift provided the inspiration for Staff Development Day in February, which focused on how to more effectively use technology to support our goals as educators.

The day began with a presentation by Bonnie Blagojevic and Chia-wa Yeh on digital photography and digital video. (They also gave a like presentation at the 2003 NAEYC conference in Chicago along with Mary Ellin Logue, an assistant professor in Early Childhood Education at the University of Maine.) Blagojevic currently works at the UM Center for Community Inclusion and Disability Studies as a research associate. Yeh works at Bing as technology coordinator, research coordinator and teacher.

For the Bing staff, Blagojevic listed educational “objectives” that can be effectively met through use of technological tools: Technology • Creates a forum to celebrate diversity • Makes learning more individualized • Offers opportunities for further professional development • Provides a medium for reflection • Serves as a tool to advocate early childhood education and the importance of the early years.

Then she gave some examples of using technology in her own classroom with digital photography as the launching pad. One project began with photographs of each child as a basis for an investigation of diversity within the group. Children studied their peers’ photos for distinguishing features such as eye color, hair color and skin color as well as for unifying qualities such as number of ears, eyes, nose and so on. These investigations led to meaningful classroom discussions about valuing diversity. Blagojevic also pointed out that rather than printing the photos, the children enjoyed seeing pictures of themselves and their friends on the computer screen.

In addition she noted the invaluable role that technology can play in working with parents. Everyday, teachers get to witness firsthand children’s experiences at Bing; technology can communicate to parents the significance of these daily events and can offer a tool for interpretation as well.

A relevant anecdote from East PM: One day during winter quarter four-year-old Elijah came to school proud that he knew how to Irish Dance. When questioned by a teacher about this type of dance, he was quick to offer a demonstration. He soon realized that he needed music so he and the teacher searched through a collection of CDs until he heard “Turkey in the Straw” and pro-claimed, “This one is perfect!” As the music began, he approached his “stage” (the block area) and began Irish dancing to the song.

Very soon a crowd of curious East PM classmates gathered around him. With support from the teacher, Elijah began teaching Irish Dance lessons to a group of eight children, who were quick to join in. Teachers were able to use photos taken that day with classroom digital equipment and share them with the parents of the children and the children themselves. Thus, technological tools provided parents and staff with documentation of a significant classroom event and its cognitive, emotional, physical and social learning value.

Next, Yeh addressed using digital video to document key areas of child development,
such as block building and dramatic play, for teacher training and Stanford undergraduate psychology courses taught at Bing. She noted that these video clips with movement and sound offer vital information as well as a “shared reference” for professional discussion. She showed a video clip of several children’s experimentation and predictions of whether plastic balls or wooden balls would go farther down a ramp and invited the teachers’ comments. Through viewing the clip, the staff members learned from their colleagues ways to facilitate children’s learning by asking good questions.

Additionally, as a part of Staff Development Day, teaching teams offered some highlights of other ways technology has been used to enhance classroom experiences. • Quan Ho, teacher in East AM, talked about using technology for bookmaking; specifically, Ho discussed how iPhoto and PowerPoint enabled East AM to create a book titled “Who Takes Care of You?” in which pictures of the children were paired with quotes revealing their thoughts on the subject. • Nancy Howe, head teacher, gave an example of how Center PM used the classroom scanner to create a “field guide” of the plants and trees in their yard. They scanned images of blossoms, branches and leaves from the yard and identified each of them. The results were compiled in a book that could be carried around the yard as a reference. • Tom Limbert, head teacher in West PM, highlighted the convenience of collecting, organizing and formatting daily anecdotes and documentation in PowerPoint, enabling children to revisit experiences of their own and learn about the experiences of other children in their class.

The February staff day concluded with small-group workshops in each classroom led by Andrea Hart, Quan Ho, Tom Limbert and Chia-wa Yeh. The teachers demonstrated specific, practical ways to use software programs in daily teaching. Their presentations focused on tools in iMovie, iPhoto and PowerPoint. The day’s demonstrations and examples inspired new ideas for creativity through technology and helped demystify some of the tech tools thankfully available at Bing.

Creativity and Innovations — Fall Staff Development Day
By Ilyssa Silverman, Assistant Teacher

Bing Nursery School teachers gathered in the multipurpose room last fall for the initial portion of fall staff development day. Topics of the day included basic materials use, emergency training, parent meeting management and workshops on brainstorming, making books and water play. The daylong event concluded with visitors from a local children’s museum.

A video on emergency preparedness was first on the morning’s agenda, followed by a discussion led by Bing director Jeanne Lepper and assistant director Jennifer Winters on the use of basic materials — block, clay, easel painting, sand and water — a core element of the program at Bing. In preparation for initial parent meetings Winters reviewed examples of developmental histories.

Then, all moved to East Room where workshop leaders Jeff Grant and Kate Burch from Palo Alto-based IDEO’s product development group led exercises in effective brainstorming. The crux of the lesson was to suspend judgment, putting even the most ridiculous idea on the table in hope that it will inspire ideas in others. “There is no bad idea,” they explained. “There are ideas that may not be possible or practical, but they all have the potential to inspire an idea that will be.”

After lunch all reassembled first for a bookmaking workshop led by Margaret Miller, a parent in Center PM. Miller pushed staff thinking beyond the traditional “folded construction paper and staples” model and suggested novel ways to create books — with chopsticks, hole punches, pipe cleaners, ribbons and string — and to inspire Bing’s young writers as well.

Next, school librarian and teacher Nancy Verdizabella demonstrated innovations in the curriculum area of water play. After she talked the staff through the use of funnels, large basins, measuring tools and pipes to create an elaborate water play setup, all staff were ready to develop new water play ideas.

Finally, Palo Alto Junior Museum director Rachel Meyer, exhibit director Darin Wacks, and fellow collaborator and Bing parent Evan Brooks presented some of their past and present exhibits. They talked about the creative process that goes into the museum’s impressive exhibits including the PAJM’s interactive auditory experiences, large light tables and life-size puzzles. The team showed Bing staff how their creative brainstorming can result in some remarkable design ideas and materials for young children, thus rounding out a day of new ideas for staff to share with each other and children.
WHAT parent or teacher has not been invited by a child to observe and comment on his or her artwork? Drawing, painting and other forms of art are certainly a form of expression and communication at any age. But, as was emphasized at a favorite presentation I attended at the 2003 National Association for the Education of Young Children, when armed with the right “tools” discussing a child’s artwork with the child can help provide the means for developing a child’s artistic literacy.

Thousands of early childhood educators from all over the country attended the more than 1,000 sessions offered at the annual NAEYC conference, which covered a wide range of topics and themes. Bing Nursery School was represented by 12 teachers, several of whom made presentations.

As a first-year teacher at Bing, I was offered the opportunity to attend the conference. I was shocked at the sheer magnitude of the event. It was held Nov. 5-8 at the Convention Center in Chicago. It was a bit difficult to select which sessions to attend among the many choices. In the end, I was able to attend a number of sessions, all of which had something valuable to offer. I chose to concentrate on one presentation that gave me insight into talking with children about their artwork (an area of great interest to me).

Rosemary Althouse, professor emerita of early childhood education at Winthrop University, S.C., Margaret Johnson, associate professor teaching art criticism and art education at the State University of New York at New Paltz, N.Y., Alicia Johnson-Grafe of Brixham Montessori Friends School, York, Me., and Sharon Mitchell, preschool teacher in a public school in Fort Mill, S.C., presented “The Colors of Learning: Applying Vygotsky’s Theory of Learning to Young Children’s Art Experiences.” Their presentation was based on The Colors of Learning: Integrating the Visual Arts into the Early Childhood Curriculum, by Althouse, Johnson and Mitchell. Their book was published in 2002 by Teachers College Press and NAEYC. The presentation stressed the importance of children developing aesthetic literacy. According to Lev Vygotsky, a famous Russian psychologist and scholar, higher forms of mental activity are constructed and transferred to children through dialogue with other people. Specifically, Vygotsky’s philosophy focuses on four key points:

- Children construct knowledge
- Development cannot be separated from social context
- Language plays a central role in mental development
- Learning can lead to development.

Teachers are able to assist children’s cognitive development by discussing the children’s artwork with them and asking appropriate questions. The presenters outlined six categories of appropriate questions including the process of making the artwork, materials used, ideas expressed, knowledge (concepts, vocabulary, artists studied), reflecting upon artwork and discussing future artwork with the child.

They also encouraged teachers to learn about artists and their techniques. Incorporating these aspects into young children’s artwork extends their language development. For example, the presenters suggested featuring Henri Matisse as a selected artist to study. Young children can easily relate to the bright, bold colors of Matisse and the many geometric shapes in his artwork, specifically his collages. The “art talk” that may accompany his work are topics such as line, shape and hue. A teacher may ask a child simply to tell him or her about a shape, or name several shapes, or perhaps, ask the child to tell what he or she sees in the artwork. Other artists the presenters suggested using were Jackson Pollock, known for his action painting, and Claude Monet, famous for his landscapes and portraits. Children can gain much knowledge from these paintings by focusing on the elements (color, line, shape, texture) and principles (balance, pattern, proportion, unit/variety) of design.

The presenters shared with the attendees a list of suggestions to keep in mind when discussing art with children. The list was valuable, as it allows teachers to gain new insights and generate fresh ideas as well. The handout was shared with all Bing teachers upon returning from the conference. I felt as though this presentation offered me the most at the NAEYC conference and, in turn, allowed me to give back more to our children at Bing.

I drew a millipede. It’s happy. It’s not dead; it’s walking. Somebody didn’t step on it. By Juliette R.-W., age 4
A n ancient Roman road runs through the center of Reggio Emilia, a small city in northern Italy. The municipal preschools and infant-toddler centers in this formerly little-known city have created a phenomenon that continues to amaze the early childhood community worldwide. One of its preschools, the Diana School, was named the best preschool in the world by Newsweek magazine in 1991. Several times a year, hundreds of eager educators and administrators journey to this now affluent city to immerse themselves in its culture and to witness firsthand its innovative city-run preschool and infant-toddler centers.

Bing teachers Mary Munday, Parul Roy, Nancy Verdzabella and I attended a 10-day study tour in Reggio Emilia in October 2003. We joined 230 other educators from nine countries in an inspiring educational experience, which included thought-provoking workshops, school visits and dialogues with colleagues from around the world.

The historical and socio-political context from which the Reggio Emilia municipal preschools emerged is crucial in understanding its collaborative and progressive roots. After World War II, a group of parents decided to build a school for young children. They raised funds by selling an army tank, a few trucks and some horses. In the ’60s, the parents and teachers in Reggio Emilia strongly advocated publicly supported preschools. Later, this assertion coincided with the women’s movement with mothers demanding their right to work and their children’s right to quality education. Its first city-run preschool, named Robinson after Daniel Defoe’s hero Robinson Crusoe, came to life in 1963. In 1967, all of the parent-run preschools came under the administration of the municipality as a result of the people’s continuous efforts.

Under the leadership (1964-94) of the visionary founder Loris Malaguzzi, a team of teachers worked closely with children and parents to explore theories through experimentation and thereby developed a practice that is firmly based on the belief of children’s right to excellent education. The Reggio Emilia municipal preschools and infant-toddler centers gained international acclaim for their innovations in quality education during the late ’80s and early ’90s.

The Reggio approach continues to inspire early childhood educators in Europe and the United States and increasingly in other countries. Reggio’s traveling exhibition, “The Hundred Languages of Children,” provides a window into the long-term projects and inquiry-based teaching that took place in its schools. One central theory of Malaguzzi, who died a decade ago, holds that children possess a hundred languages, that is, a myriad of ways to express themselves creatively and symbolically in addition to the conventional spoken language. The hundred languages exhibit is a stunning visual documentation consisting of photographs, children’s drawings and words, sculptures, and teachers’ interpretations. The exhibit is astounding to the early childhood community for the amazing depth of the children’s thinking and their capabilities in communicating their thoughts through the many languages/media made available to them, e.g., clay, drama, drawing, light, music, painting and shadow play to name a few.

Reggio staff comprises two teachers for 25 children in each of the classrooms, with some auxiliary staff (including a cook who prepares lunch) and an “atelierista” (art teacher). Team-teaching is highly valued to foster different perspectives. The art teacher is an integral part of the team, working with all the children in a preschool and contributing a unique viewpoint. Besides the regular school staff, a “pedagogista” (pedagogy coordinator) works with a few schools as a mentor, providing professional development and ongoing in-service training.

A remarkable feature of the Reggio schools is the “atelier” (art studio) in the preschools and the “mini-ateliers” inside
the classrooms. The art studio serves a variety of functions. In the well-equipped space, children can learn and work on techniques in various art media and engage in group research projects while staff can work on assembling documentation.

Additionally, each school has a “piazza.” Like a typical Italian town square, it is a place for encounters, a place for people to relate to one another. The area is also set up with two semi-circular enclosures for “dress-up” clothes. Children can go to the piazza and engage in dramatic play for extended periods of time. In some schools, a small pyramid-like structure lined with mirrors is available in the piazza as well. Children can play inside and get a look at themselves and others simultaneously from different angles.

Careful attention to detail and organization is noticeable in the Reggio school environment. Like teachers at Bing, the Reggio educators view the environment as a vital component for conveying information and meaning. Carefully selected objects of beauty enhance the school atmosphere and natural materials such as driftwood, leaves, rocks and shells adorn a mini art studio. A sense of wonder imbues a classroom loft where children’s building-block constructions are projected onto a screen, creating a large-scale outline of a city.

The intent of the Reggio study tour was not so much to instruct as to provoke. Reggio educators describe their teaching as an approach, rather than as a model with formulas. They see theory and practice as equal in importance. Central to the Reggio philosophy is the image of the child as a protagonist with potential. The school is seen as a dynamic place where children and teachers and parents are participants.

“Reggio is a place where value is transmitted, discussed and created. School is a place where culture is created and democracy lived.”

—Carla Rinaldi, pedagogista, municipal preschools in Reggio Emilia, Italy

The plurality of languages for symbolic expression, the practice of listening to children and the value of documentation were evidenced during one school visit where children were present. Seeing themselves as researchers and learners, their teachers listened carefully to the children and attended to their interests. At the La Villeta School, some of the children had gone to the beach during their summer vacation. This day, small groups of children worked together with teachers to study waves as a result of their interest. Another group used clay to explore the shape of waves while other children employed light to study movement. The sinks in the classroom were appealingly filled with blue water and miniature sea creatures.

Elsewhere, children engaged in activities of their choice such as block building and dramatic play. In another classroom, children used shadow screens to develop ideas and stories about sunsets as others used a light table to produce one. Meanwhile, the teachers took notes and/or drew diagrams to help reflect and understand how children learn. This documentation also served as a springboard to further exploration by allowing the teachers to revisit the children’s ideas.

Throughout the study tour, the Reggio Emilia educators passionately articulated their philosophy and eagerly invited the participants to share their own ideas. Rebecca New, a Tufts University professor who has conducted studies in Reggio Emilia, stated well: “Perhaps what the Reggio educators do best is taking on the role of ‘provocateur’ — one who gets others to think about something in a new and compelling way.” Similar to their approach with children, the speakers intended to compel attendees to ask questions and re-examine their own beliefs and preconceptions. They emphasized the importance of dialoguing with one another; they welcomed different opinions. The willingness to discuss and suspend one’s own beliefs was seen as instrumental to allowing and encouraging multiple points of view.

I’m interested, in particular, in the research and documentation aspect of the Reggio Emilia approach and I hope to continue experimentation with video as a tool for teachers and children to reflect upon their experience. In Spaggiari’s words, documentation encompasses: “The ability to narrate the story unfolding inside the schools. The ability to re-interpret and re-elaborate all the processes of learning that take place inside the school.”

The study tour brought to life for me what I had previously learned from conferences on the Reggio Emilia approach and visits to “The Hundred Languages of Children” exhibition. Ultimately, I came away from the awesome educational tour feeling deeply invigorated by the Reggio educators’ exceptional practice and their intellectual provocation.
In June, Bing Nursery School teachers, Nancy Verdtzabella and Seyon Verdtzabella, attended the 9th annual Northwest Teachers’ Conference (NWTC) in Mt. Vernon, Wash. The six-day conference is a platform for professional development and personal renewal for educators. It provides teachers and administrators with opportunities to reaffirm their ability to teach through retrospection, personal reflection, collaboration and focus on their intention as educators.

Many of this year’s conference participants were inspired. They returned to their educational programs with ideas about how to promote team building, communication, poetry, singing, song writing and storytelling. The conference also broached many more topics, all of which were explored in small and large group seminars. For instance, in order to become a true community, children, parents and educators need to know each other. Educators take the lead in encouraging a supportive atmosphere in which each may notice the details about the other. These details can be shared through conversations, games, pictures, songs and stories.

Another topic of interest at NWTC 2004 was the role of the teacher in the classroom. Teachers are not dispensers of knowledge to children but collaborators in children’s learning. They invite and encourage students to take an active role in their own education. For example, when teachers share a song, children might clap, move, sing — or simply listen. The teacher’s role is to support and recognize how the children experience music. It is important to cultivate their desire to create, to invent, to wonder. Children are also invited to take their own ideas and experiences and infuse them into an existing song. Or, perhaps they will be inspired to create their own song at another time. Songs can help children and teachers address issues that impact their lives. Additionally, children can derive communication skills and speak about what they observe, understand or have a passion for. Likewise, teachers can benefit from this creative process.

Also, NWTC 2004 touched on how educators structure the learning environment. Consider that children need the time to wonder, to speculate. Adults might see a quiet and inactive child as bored. However, it is the teachers’ responsibility to learn about that child’s temperament and allow him or her to wonder, to be private. Space and time are essential for children to imagine and play. Educators may promote scientific learning by supporting children’s natural curiosity, inquiry and discoveries throughout the indoor and outdoor environment. One novel way to develop children’s thinking is to start the academic year with a classroom with blank walls, a canvas yet to be painted. As the journey of the class progresses, the walls will begin to reflect what is important to the children in that class. Teachers and children collaborate and negotiate the curriculum. Curiosity, intensity and creativity are enhanced.

Teaching requires constant giving — giving of attention, giving of energy to learning. NWTC rejuvenates educators to continue giving their very best to each and every student in their class.

Photos not available online.

Bing Nursery School —
A Family Tradition

Armando Martinez of Venezuela attended Bing Nursery School in 1972 while his father was pursuing a doctorate at Stanford University. Martinez is now a doctoral candidate at Stanford himself. Both of his sons, Armando and Tomás, recently attended Bing also. Martinez has made a tremendous contribution to Bing; he designed several extensive database programs for enrollment, fund-raising and gift giving. His wife Corina Martinez co-chaired the 2003 Harvest Moon Auction.

Clockwise, from above: Armando Martinez (in lower right corner) at Bing Nursery School in 1972. Martinez implementing a database program he designed for Bing. Martinez with sons Armando and Tomás, both of whom attended Bing recently.
Childhood: Possibilities, Potentials, and Contexts
Voices from Pistoia, Reggio Emilia, and New England

By Jennifer Winters, Assistant Director

Hampshire College, Smith College, The Eric Carle Museum of Picture Book Art and The University of Massachusetts (Amherst) were the sites of a three-day conference titled Childhood: Possibilities, Potentials, and Contexts. Five of our staff members — Nancy Howe, Peckie Peters, Ilyssa Silverman, Paula Smith and Jennifer Winters — attended the event.

The conference challenged the participants to explore the approach to early childhood education developed in Italy in the cities of Pistoia and Reggio Emilia. This approach has sparked cross-cultural conversations about how communities might best attend to their children. The presentations by speakers from New England, Pistoia and Reggio Emilia addressed some key aspects of these innovative educational programs including:

- Documentation as a tool for assessment and advocacy
- Environments created for well-being and learning
- Experiences constructed by teachers and children together
- Home, school and community relationships
- Symbolic and expressive languages of children
- Teacher as researcher

These presentations were further heightened with visits to Smith College (Fort Hill Campus), The Early Childhood Laboratory School of the University of Massachusetts and The Hampshire College Children’s Center. We believe that Bing has much in common with the other laboratory schools such as carefully planned indoor and outdoor environments, well-trained staff and thoughtful and purposeful documentation.

The Eric Carle Museum of Picture Book Art was also a highlight of our visit. Located in Amherst, Mass., this is the first full-scale museum in the country devoted to national and international picture book art, conceived and built with the aim of celebrating the art to which we are first exposed as children. At the museum, we explored the galleries and attended workshops on books for young children.

The following quote speaks to the heart of the conference:

“We educators, as we work with children, feel the need to grow in our competencies; we want to transform experiences into thoughts, thoughts into reflections, and reflections into new thoughts and new actions. We also feel a need to make predictions, to try things out, and then interpret them. The act of interpretation is most important. We have to learn to interpret ongoing processes rather than wait to evaluate results.” (Loris Malaguzzi, The Hundred Languages of Children: Advanced Reflections, 1998, p.73, adapted by Lella Gandini)

“The best preparation for a bad experience is a good experience.”

By Rinna Sanchez-Baluyut, Teacher

Many parents worry about how their children will cope in a challenging situation. Many have asked what to do to prepare their children to face difficult times as they mature into teenagers and adulthood. Renowned child psychologist David Elkind addressed this issue last October in a talk at Foothill College; he offered a perspective on what is truly important in children’s lives.

Elkind, PhD, a professor at Tuft University’s Eliot-Pearson Department of Child Development, is the famed author of many books including The Hurried Child and Ties That Stress: The New Family Imbalance. Elkind stated that the more positive experiences we give children in their early years, the more successful they will be at overcoming difficulties later on in life. According to Elkind, play gives children a whole library of positive memories. Play has a long-range influence, whereby children are able to retrieve these happy memories in times of stress. Play is a healthy release mechanism and an important activity that all children need.

Unfortunately, more and more children are being deprived of play. Elkind cited that some 40,000 children in public schools do not have recess, thereby losing valuable time for play. Not only are we hurrying children but we’re also denying them the healthy development of self-expression, he said. Elkind added that today’s toys do not reflect children.

These toys don’t encourage creative play; they’re simply recreational, like electronic toys. Creative play is an expression of our personal feelings and issues, but when toys are recreational, they don’t reflect children’s feelings.

What can we do?

Make each child feel important. Respect and trust your child. Allow for play. Let children be children. Provide opportunities on all levels for creative play by offering basic materials, such as blocks, paint, sand, water, where children can truly create their own experiences.

Provide them with a solid foundation of happy memories and positive experiences they can always look back on in preparation for their next challenge.
Kindergarten Information Night
By Lynne Varner, Bing parent and Knight Fellow at Stanford

Parents waving their kindergartners off to school can breathe a sigh of relief at having the arduous job of choosing the right school behind them. But parents of pre-school age children should take note: It’s never too early to start looking for the right kindergarten class.

At first, the process can seem as intimidating as selecting the right graduate school. (In fact, many parents deem their choice of kindergarten a strong indicator of whether their child will make it to graduate school!) School tours, teacher interviews and mounds of educational brochures can turn what should be a wonderful transition into a daunting process.

Kindergarten is a critical decision. The environment that launches our children’s school lives plays a major role in whether learning is a fun lifelong pursuit or torture.

But there’s hope. Armed with solid information about their child’s educational options, parents can get the most out of this transitional period.

To help parents navigate the kindergarten process, a panel of educators spent the evening of Jan. 21, 2004, at Bing Nursery School, addressing readiness and other relevant issues. Panel participants included Dr. Rick Lloyd, a professor of pediatrics at Stanford Medical School; Jeanne Lepper, director of Bing Nursery School; Susan Charles, principal of Ohlone Elementary School; Beth Wise, Bing music specialist, head teacher and a former kindergarten teacher; Svetlana Stanislavskaya, Bing enrollment administrator; Peckie Peters, head teacher in West AM and a former kindergarten teacher; and Tom Limbert, head teacher in West PM.

The first decision about kindergarten is whether your child is ready for it. It isn’t fair or helpful to place a child in an environment that is socially inappropriate, too difficult or too easy. One child may be ready for kindergarten at age five while another child needs an extra year to prepare. This isn’t a decision to be made casually.

“There are no good studies that show there’s any compelling reason to hold a child back if they are otherwise socially ready,” Dr. Lloyd said. The downside of holding a child back for a year is that they will sexually develop earlier than their peers, a socially awkward circumstance especially for boys.

Moreover, according to Bing director Jeanne Lepper, a mix of ages in kindergarten can be a plus. Yet, state-by-state age cutoffs — in California children must turn five by December 2 to be eligible for kindergarten — hinder more than help.

“The very students who need school the most are the ones being asked to wait,” Lepper said. “Some of this is tied to funding, those who are better developed and test better garner more money for the schools.”

Readiness tests can help evaluate a child. But the best measurement is preschool teachers. Talk to your child’s preschool teachers to get a sense of your child’s learning style, as well as the teaching techniques that serve him/her best.

Bing head teacher Limbert said in his experience working with children, the most important ingredient to kindergarten readiness is the parent’s belief that the child will succeed in kindergarten.

“If you believe your child will be ready and convey that to your child, they’ll pick up on that,” he said.

The key to preparing for kindergarten does not lie just in academics. Peckie Peters recalled that her son entered kindergarten writing his name across the page the opposite way of the other children and his letters were barely legible. But Peters recalls the teacher reassuring her that her child would be just fine. And he was.

A child entering kindergarten need not know how to read.

“A three-year-old who can read is no smarter, in an IQ sense, than one who is unable to read,” Dr. Lloyd agreed. In addition, the things a child should know by kindergarten, such as knowing one’s colors, numbers, and have the ability to take simple directions, can be learned in preschool or other readiness programs.

A child’s emotional well-being is as important as their academic success. In searching for the best school, parents should be aware of the emotional and behavioral stages of kindergarteners. Dr. Lloyd spent a good part of the evening outlining the general emotional anatomy of five-year-olds. His words should serve as reassurance:

Five is the best age. Children want to be good. They want to please their mother most of all, next they want most to please their teacher. At five, there is a significant leap in speech maturity that allows children to communicate more effectively and feel more empowered.

While four-year-olds tend to be more mercurial, Dr. Lloyd says children develop a longer attention span at five and a more positive outlook. As they experience life at this age, they tend to see things on the good side. This optimistic outlook helps children gain resiliency and a positive sense of their place in our world.

A five-year-old doesn’t have much temporal sense. They know there’s a past and a future but they tend to live in the here and now. This sense of time needs to be respected and acknowledged. 5-year-olds also want their own possessions, their own space and their own friends.

To a five-year-old, everyone and everything is eternal. They don’t understand death as permanent and thus may not grieve if a relative dies.
Because five-year-olds want to be good, they are usually not worriers. They don’t obsess over things. If your child does seem unusually bothered by things, it might be a sign of something amiss. Children at age five begin a love affair with words and facts. It isn’t so much what they learn that engages a five-year-old but the discoveries that make learning itself fun. This is the time children begin to develop a sense of pride and self-respect. Dr. Lloyd suggests this is the time to give children chores to do. Growing up in a Nova Scotia fishing village, Dr. Lloyd can attest personally and professionally to the importance of responsibilities.

“The child feels that they have some value in society which for them is family,” he points out.

Five-year-olds don’t want complex food. They want simple dishes. Don’t let a child dominate the family diet. They will eat a variety of things if presented to them and if there are no other unhealthy snacks to tempt them. Make sure eleven hours of sleep is available to your five-year-old every night. Since sleep is not attractive to a five-year-old, parents may need to create a settling down routine such as bath, story time and bed. If a child’s home life is stable and includes some or all of the above, success in school will be easier to achieve.

In the end, where is the best place for one’s child to begin his/her formal education? All of the panelists agreed that in most cases, a parent won’t go wrong in choosing a school as long as the home remains the primary source of stability and love.

“School is not nearly as important as being well fed and getting a good night’s sleep,” Dr. Lloyd cautions.

“People who go into education are people who have an affection for children,” says Ohlone principal Charles, herself a mother of four. “Be happy that they’re off to school and trust your teachers,” Charles sums up.

Beth Wise, a parent of a fifteen-year-old and a ten-year-old and a former kindergarten teacher herself, agrees:

“When the classroom door closes, there is a special kind of love, bonding and nurturing that goes on,” she said.

---

**International Visitors**

By Beverley Hartman, Head Teacher

Bing Nursery School continues to provide a warm welcome to educators from near and far to further our ties to those committed to the education of young children.

During the 2003-2004 academic year, Bing hosted and provided tours for groups from Japan, Korea, Singapore and Taiwan and for two long-term visitors from South America. Each visiting group included administrators and teachers. We enjoyed learning more about other cultures’ early childhood education practices as well as hearing observations and responding to questions about Bing.

As part of Bing’s ongoing mission, director Jeanne Lepper arranges for Bing teachers to join tours and lead small groups, giving them the opportunity to articulate the Bing history, philosophy and play-based curriculum. The commingling of Bing faculty with visitors promotes dialogue. Bing’s own teachers gain insights into Bing culture and educational practice through the observations and questions of their international colleagues.

Visitors’ reflections often include appreciation of the environment designed especially for children, the use of basic materials including unit blocks and the quality of the interactions between teachers and children. Visitors comment on the importance of well-educated and experienced teachers in the lives of children in an evolving modern society. Many countries and cultures around the world are not far apart in these concerns and priorities for children.

On occasion, teachers from other countries have the chance to visit the classroom for a longer and more in-depth experience. Recently circumstances allowed two guests from Brazil to observe for an extended time in East AM this year. One of these interested visitors Luciana Kingston has a background in psychology and her husband currently attends graduate school at Stanford. Visitor Melissa Menezes, a teacher, works with her family operating two schools. She learned about Bing through a relative of founding director Edith Dowley and wanted to learn more about the program and philosophy to articulate its practices in her family’s schools. Bing teachers likewise benefit from the thoughtful interactions with these dedicated and intelligent visitors.

Bing staff and teachers hope that through these international encounters the Bing model of early childhood education may foster positive and productive relationships throughout the learning community. The ripple effect may be advocacy for young childhood education, including innovations in curriculum design, facilities and school materials, beyond the Bing community.

---

A delegation of principals from Singapore visit Bing Nursery School in December 2003.
Bing Children’s Fair

What did you like best at the Bing Fair?
I like the game with the fish.—Brett
I liked the puppet show and all sorts of things. We got to go in all the classrooms anywhere we wanted.—Alia
I liked EVERYTHING!—Vijay
I like playing the beanbags.—Jackson
I liked having so much fun.—Ryan
My favorite is the marching band.—Hanna
I liked the obstacle course best. It was really hard, and it had two open spots.
—Lauren C.
My favorite was when I helped my grandpa do the face painting.—Jake
I like the food. It was watermelon, a cupcake and pizza.—Zoe
I liked the big band and the tree.—Pablo

Back to Bing Night

Back to Bing Night is a parent event for Bing parents to meet teachers and other parents and to receive information about school events and fund-raisers. Many parents participated in the very first Back to Bing Night in 2003.

Take Our Daughters and Sons to Work at Stanford

Bing Nursery School participated as a site for the “Take Our Daughters and Sons to Work at Stanford” on April 22, 2004. Nine workshop attendees, including Bing alumna, Rachel Fox (5th from right), spent a morning at Bing. Some built with blocks; some played musical games with children; some read books at snack time. The attendees also learned about current research at Bing from researcher Mikkel Hansen and talked to Patricia Chang, a Bing parent and a pediatrician.
2003 Harvest Moon Auction — Bing sotto la Bella Luna
By Jennifer Winters, Assistant Director

The past year’s Harvest Moon Auction, “Bing sotto la Bella Luna,” had a robust and sparkling Italian theme inspired by author and artist David Macaulay’s book Angelo. The event marked the 15th annual celebration to benefit the Bing Nursery School Scholarship Fund.

The Schwab Center’s banquet hall, the setting of the 2003 event, was bejeweled with scenes from Italy. Opera singers entertained and the number of auction items surpassed previous years. The evening commenced with the traditional silent auction, which was full of amazing art, decadent restaurants, fantastic getaways and vacations, one-of-a-kind sporting items, world-class wine and an abundance of items for children.

A very lively “live” auction followed, emceed by Bing parents, Warren Packard and Bob Burlinson, who looked ever so dapper in traditional Roman attire. The live auction included a spectacular array of items such as: a custom playhouse to match your home, a dinner of a lifetime by a famous Italian chef, a month of meals without cooking; a cruise to New Zealand as well as Sicily, a round of golf at Cypress Point; a fabulous night in San Francisco, a five-night stay at The Orchid at Mauna Lani, a perfect Napa night with dinner at the legendary French Laundry, a stay at the Grand Hotel on Mackinac Island, a week in your private La Punta at Las Vegas casita; but the pièce de résistance was a rabbit from the same family as beloved Bing Bunny!

Everything together made for a fun-filled and successful evening.

In addition to the wonderful evening, “Bing sotto la Bella Luna” also raised nearly $250,000 for the Bing Scholarship Fund. And, once again Helen and Peter Bing made a generous gift of $50,000 to the Fund.

As one of the few nursery schools in the country to fund a substantial financial-aid program, the Bing scholarship program enables diversity and outreach, which are important parts of our mission and add significantly to the positive experience of the children at Bing. More than 20% of the families receive financial aid.

We extend our thanks and appreciation to all who attended and participated and we look forward to seeing everyone again this fall.

The success of any event of this magnitude is a direct reflection of the dedication and hard work of a great many contributors and volunteers. We offer sincere thanks to all!

We would also like to recognize some folks from the Bing community for their contributions above and beyond the call of duty — specifically, auction co-chairs Jaspi Sandu and Corina Martinez for their endless commitment — and the Auction Committee Members whose tireless dedication from start to finish ensured success.

2003-2004 Annual Fund Report

Thanks to the contributions of Bing friends, parents and staff members, we were able to raise $266,000 during the annual fund year Sept. 1, 2003, to Aug. 31, 2004. The participation of our current Bing families reached 62 percent, an increase from 43 percent the previous year. In 2004-2005, we are striving for 100 percent participation!

The annual fund is an important part of the school budget. We depend on the fund to support the additional assistant teachers in each classroom, scholarships for children who would otherwise be unable to attend the school as well as specialists and staff development. No gift is too small or too large. Our goal is for every family to participate in supporting the school to help us continue the level of excellence that makes Bing such a special place for young children. A big thank you to all.
Red, White & Bing
HARVEST MOON AUCTION 2004

Benefiting the Scholarship and Enrichment Fund for Bing Nursery School, Stanford University

Celebrate the beauty of America at Bing's 16th Annual Harvest Moon Auction. Please save the date of November 6, 2004 at 6:00 PM for this year's auction at the Frances C. Arrillaga Alumni Center on the Stanford University campus. Enjoy a fabulous evening of food, entertainment, and exciting auction items. All proceeds benefit the Bing Nursery School Scholarship and Enrichment Fund.

If you have any questions or would like to help with this year's auction, please contact us at harvestmoon@stanford.edu or at 650-208-8362.

Thank you, Jaspi Sandhu and Catherine Raffa, 2004 Harvest Moon Auction Co-Chairs
Bing Nursery School  *  Stanford University  *  850 Escondido Road  *  Stanford, California 94305