Director’s Column: Frequently Asked Questions About Bing

by Jeanne W. Lepper, Director

An interview with Jeanne Lepper conducted by Chia-wa Yeh, editor of The Bing Times.

I know Bing was founded and is run as a laboratory school, but what does that really mean? Laboratory schools have been part of universities and colleges in this country for well over a hundred years. The function of these schools is determined by the nature of the institutions to which they are attached. For example, they may serve as the primary research laboratory for psychologists in a research university, as is the case at Bing, and they are often part of teacher-training institutions. Basically, these schools not only provide excellent education for the children enrolled but also a program designed to facilitate research on children’s development, to assist in the training of undergraduates to work with children, and to provide an exemplary model for other professionals.

One group of laboratory schools includes the famous schools that operated from nursery school all the way through high school at campuses like the University of Chicago, the University of Michigan, UCLA, and the Bank Street College of Education. These schools promote the longitudinal study of development and research on the long-term effects of educational practices, and they provide sites for teacher-training at many levels.

The second large and prestigious group of laboratory schools is comprised of the laboratory nursery schools including the Bing Nursery School at Stanford, the Eliot-Pearson Children’s School at Tufts University, the Merrill-Palmer Institute, the Mills College Children’s School, the Yale Child Study Center Nursery School, the Wimpfheimer Nursery School at Vassar College, etc. These schools have their roots in G. Stanley Hall’s child study movement. Their emphasis on research goes all the way back to the Iowa Child Welfare Station where early studies of children’s health and development revolutionized the treatment of orphaned and hospitalized children.

Many of the early laboratory schools began as part of the progressive movement in education. John Dewey, the founder of the progressive approach, taught first at the University of Michigan, then at Chicago, and later at Columbia. His movement, perhaps the most well-known effort for improving schools in the 20th century, stressed the importance of education as experience, the project approach to education, and learning-by-doing.

As a graduate student at Michigan, I was impressed with the long-term projects carried out in
various grades at University Elementary School. For example, the sixth graders one year researched beekeeping, then kept bees, made honey, sold it throughout Ann Arbor, and raised enough money to finance their class trip. They then studied interest rates and decided on the best bank to place their funds to gain additional income until the trip.

Laboratory nursery schools like Bing provide a site for extensive quantitative studies of a particular developmental period. Bing Nursery School is the largest school of this type in the world and has been the site for hundreds of studies by leaders in the field of developmental psychology, as well as a training ground for future researchers, clinicians, child policy advocates, and others. In the psychology courses taught at Bing, students have the opportunity to see theory and principles put into practice. Numerous undergraduates write in their evaluations and in personal notes to me that these courses are among the most memorable and valuable they take at Stanford.

In the observation courses, for example, they can see behavioral changes and watch children react before their eyes. When participating in the classrooms, the students have to think all the time, assess the child’s behavior and reactions, and make a judgment about an appropriate response. It is real life, or “experiential learning,” as John Dewey would have put it.

There is a large enrollment at Bing School, but the age range of the children is narrow, two to five years. Why did you choose this age group to focus on during your career?

There’s no question that I’m enamored with this age group. The tremendous amount of growth that takes place in the first five years of life combined with the engaging qualities of young children make this a field I never tire of and am constantly excited about. Young children are sorting out knowledge and understanding, and the process is right there for us to observe, think about, and respect. For example, a child recently described Bing School as her “universery.”

My passion for this age group began with my early experience in exemplary laboratory schools and child study departments on the East Coast. The fact that there is a discipline, the scientific study of the child, that allows us to pay close attention to development of young children excited me greatly and still does. I also like very much the concept of an outstanding school for young children with a large enrollment to support cutting-edge research with this age group and to serve as a demonstration school for visitors. However, I do miss seeing children continue through the elementary school years, both because of my own academic interest in longitudinal studies and because young children do not always remember their early years. This is why we encourage parents to bring their children back to visit and are very happy to include siblings in the school in order to know the family over a period of years.

Elinor Fitch Griffin, an author I like to quote in the courses we teach here at Bing, describes three- and four-year-old children in this way: “They are on an island of childhood set apart from what came before and from what will come later. This time in their lives is neither babyhood nor childhood as we adults remember it. Yet education solidly based on an understanding of these children and designed especially for them could bring to our society,
as the children mature, a new richness we cannot afford to be without.”

Tell us the basic facts and figures about Bing.
I’m glad you’ve asked me that question, because I’m always surprised that so many people, including many of my colleagues here on campus, are unaware of the size and complexity of the school. Each year more than 450 children are enrolled in the school in the academic year and the summer session. The teaching staff of head teachers, teachers, and assistant teachers totals nearly forty. During the course of a year, a few hundred students from psychology, human biology, linguistics, and other departments take courses or carry out part of their coursework at Bing. Researchers—faculty, graduate students, and their undergraduate assistants—account for another group of thirty to forty individuals. Our team of six administrators strive to meet the needs of over 800 parents and to manage the financial work that accompanies a school of this size. Each of these groups contributes to the dynamic nature of the school, and together they make it a very exciting and special place for all of us.

What do you think are Bing’s greatest strengths?
First, the mission of the school is clear. You have probably heard me describe many times the fact that the school is maintained by the Department of Psychology to provide a site for faculty research and undergraduate training in developmental psychology. Being a research laboratory in a major university and being mandated to carry out an exemplary program provides tremendous support and motivation to run an outstanding school. Second, we have the opportunity to recruit and encourage a group of exceptional teachers with complementary skills. It’s the quality of our teachers that makes the school so successful. Third, but equally important on my list, is the physical setting, with spacious classrooms and exquisite, natural grounds so thoughtfully designed and constructed under the direction of the founding director, Dr. Edith M. Dowley. The school was built specifically for the two groups who use it, young children and their teachers on the one hand, and Stanford students and researchers on the other. This school is a natural haven for the children and adults who have the privilege of being here. The physical beauty of the outside playyards and the emotional, intellectual, and professional support the teachers strive to provide for all our constituents are what I think of as the heart of Bing School.
On May 31, 2000, Professor Dare Baldwin delivered this year’s lecture in the annual Bing Nursery School Distinguished Lecture Series. A nationally renowned researcher in child development, Dr. Baldwin spoke to the Bing community about the development of early interpersonal skills and their effects on knowledge acquisition. An Assistant Professor of Psychology at the University of Oregon, Dr. Baldwin received her Ph.D. from Stanford University and has since been investigating the mechanisms that affect interpersonal skills. In addition to her accomplishments as a researcher, she is the mother of two children, one of whom currently attends Bing Nursery School.

Dr. Baldwin began by describing the social environment that most children experience. From birth, children are social beings. For example, they have a propensity to imitate facial expressions and look at the eyes when people speak to them. Infants are also emotionally responsive to vocal intonation, and display a distinct enjoyment of games, such as “peek-a-boo” and “pat a cake.” From birth to roughly nine months, social development is characterized by an interpersonal understanding, often termed primary intersubjectivity. During this time babies seek, enjoy, and work to maintain social contact, especially face-to-face engagement.

From approximately nine to twelve months, children begin to participate in new forms of social activity. In this phase of secondary intersubjectivity, babies begin to follow the gaze or pointing gesture of an adult, to show objects to others, and to share in others’ emotions. This phase is also characterized by the comprehension and production of language. Professor Baldwin theorizes that the joint engagement associated with secondary intersubjectivity is crucial for a child’s acquisition of knowledge. To investigate this process, she has been researching the largely unknown area of how children learn words and emotions from adults.

Since children are not born knowing how to speak, they must learn to navigate through the clutter of words they constantly hear. When an adult labels an object, the child has to figure out to which object the word applies. In addition, the child has to grasp the complex time relationships between words and objects, since the adult could be describing an object that is not currently present. The child also confronts a “relevance problem” in which he or she must determine which things in the world are relevant to this new vocabulary. For instance, a child who is asked to “say cheese” for a camera has to figure out that there is no cheese around and that cheese is not even being labeled or described. Another child may pick up a novel object, discard it, and pick up another novel object while the adult who is present labels and describes the first object. Thus, the child hears the correct label for an object she no longer sees, while simultaneously hearing the incorrect label for the object she does see.

It seems that children would be totally confused by this mix-up and would therefore have difficulty labeling new objects. Yet, by eighteen months children correctly learn four to ten new words each day—a process that intrigues researchers. Professor Baldwin believes that infants use their understanding of social situations and their joint engagement skills to filter through the discrepancies of labeling and other potentially confusing scenarios. It is thus social understanding that supports language acquisition.

Dr. Baldwin took a closer look at vocabulary acquisition by conducting a study in which infants were exposed to “discrepant labeling” as in the previous
example: being shown a new object and then told the name of this object while they focused on a different novel object. Dare Baldwin postulated that the children’s understanding of social cues would help them understand which object the researcher was truly labeling. Indeed, the study’s results support her theory. All the children looked up at the speaker’s face when she was labeling the object (perhaps to check for social cues), and most showed that they did in fact know which object was being labeled. This suggested to Dr. Baldwin that the children were likely using joint engagement skills to learn object names.

To further investigate her findings, Dare Baldwin conducted the same study with two other groups: autistic children, characterized by deficits in abilities to interact socially, and cognitively delayed children with age-appropriate social development skills. When faced with discrepant labeling, the autistic children consistently mislabeled the objects. Yet the cognitively delayed children correctly labeled the objects. The evidence supports Dr. Baldwin’s theory that the development of social skills is crucial to the development of language. Dare Baldwin says future applications of these results may include training autistic children in joint engagement skills in order to help them with vocabulary acquisition.

Dr. Baldwin has also been researching how young children acquire emotive data from adults. She has conducted research similar to the discrepant labeling studies in which the researcher labels an unseen object with an emotional quality (e.g., “that’s yucky”) while the child is playing with a different item. Once again, it appears that those children who have and use their joint engagement skills are not confused by the discrepancy. Essentially, social understanding seems to help with acquiring emotive data as well as language.

Given the strong evidence for the link between interpersonal communication and knowledge acquisition, it is important that we support the growth of these skills in our children. For example, Professor Baldwin emphasized that watching too much television undercuts children’s social engagement. Television can have some educational benefits, but only in moderation; personal interaction is far more important. It is crucial that we talk to, play with, and in general, nurture our children so they can learn and grow to be healthy adults.

Observational Drawings of a Turtle Model

by Devyani B., age 5

by Leah B., age 4
Here at Bing Nursery School we are fortunate to enjoy an environment intended specifically for children. The furniture, the playyards, and the open-ended materials and activities are designed to engage children at a level appropriate to their individual development. This is also true of the teaching. Teachers carefully listen to the children and observe their play, social interactions, and engagement with materials. The teachers seek “teachable moments” when the children are primed for learning because their interests are engaged. At these moments, developmentally appropriate questions and comments can encourage the children to investigate more.

“Developmentally based curriculum should not just stay in the preschool, but should filter up,” explained Darling-Hammond, the Charles E. Docommun Professor of Education at Stanford University. She noted that children are often being taught by uncredentialed teachers who are not expected to know very much about child development, children’s learning, or methods of assessing learning. To move toward developmentally based curriculum in elementary school and beyond, educators must learn about learning and teaching in a developmental context. All too often, children are being tested on how well they perform on tests rather than experiencing evaluations of their learning as it occurs. Developmentally appropriate curriculum provides a system of checks-and-balances that sets up children for success.

There are many ways to learn about the ways children learn. Professor Darling-Hammond mentioned studying child cases and curriculum that focus on events of teaching and student learning. Student teachers figure out what learning came from a particular teaching event and how that learning relates to what is known about learning in general. How does a teacher’s understanding of development inform practice? How does a teacher’s understanding of each individual child inform the way he or she applies the many resources, both practical and theoretical, that are available to draw on? Each child is unique, and each teaching act is a matter of judgment rather than formula.

“Learning about teaching requires a balanced understanding of theory and practice,” said Darling-Hammond. Teacher education experiences should promote a career-long spirit of inquiry about theory and practice, taking into account development, methods of teaching, strategies of thinking, and assessment, to mention a few areas. Teachers can plan curriculum together and remain in constant dialogue with colleagues about their experiences with that curriculum. Less experienced teachers can benefit from having a more experienced teacher as a mentor, while more experienced teachers may find their teaching methods gently challenged as they observe novice teachers employing methods, ideas, and interests different from their own.

When teachers question together, engaging in thoughtful inquiry about pedagogy and methodology, they engage in dialogue that contributes to the building of a professional knowledge base that is not wholly dependent on teachers’ idiosyncratic personal experience.

The qualifications of teachers and the learning of students are highly correlated. The best educational experiences for children start with teaching professionals who can ask the thoughtful questions that will launch the children’s own thoughtful inquiries. When teachers and students are in partnership to bring about meaningful educational experiences, the cycle of learning can be unstoppable, a lifetime occupation.
“Look what I did!” is a familiar refrain to anyone who spends time with children. How many times have you been called over to view a child’s masterpiece? At that moment you feel as though you must make some sort of response to the expectant face gazing up at you. But which words will be both encouraging and honest? Which words will get the child thinking about his or her own work?

This was one of the topics discussed with Professor Elliot Eisner at the Spring Quarter All-School Staff Meeting as he presented his work on the development of aesthetic intelligence and the use of methods from the arts to study and improve educational practice. Professor Eisner, the Lee L. Jacks Professor of Education at Stanford University, is an internationally known expert in the field of artistic education and a leading authority on qualitative research methods in education. He has held a number of presidencies in scholarly organizations, including the National Art Education Association, the International Society for Education Through Art, the American Educational Research Association, and currently, the John Dewey Society. Professor Eisner, whose daughter is a Bing alumna, states that “art is a way of inventing the self.” Through artistic activities children develop perceptual differentiation (for instance, discriminating between a puppy and a kitten or the colors yellow and green). Through exposure to materials and sensory experiences, children’s attention to nuance grows (for instance, further discriminating into more precise categories, such as English setter as opposed to other breeds, or olive green as distinguished from other hues) as does their appreciation of these qualities. The role of the educator is to facilitate this development by providing children with basic materials whose qualities they can explore repeatedly. Allowing children to “achieve mastery within a medium” is of utmost importance because mastery, the feeling of “I can do this,” is highly motivating.

So what is the best way to respond to children’s artwork? “Leave your statements open-ended,” asserts Professor Eisner, “because once something is labeled, it is shelved and no longer explored.” For example, instead of saying “That’s beautiful” or “What a good rabbit,” you could say, “Look at how many different shades of blue you have used,” or “I see a lot of square shapes in your painting. How did you make those?”

Professor Eisner reiterated for us the language to use not only when speaking to children about art but also when talking amongst ourselves about how we perceive and how that perception affects our own cognition. Exploration of these ideas is important because, as Professor Eisner said, “This is a lifelong process. We need to teach children how to be architects of their own education.”
We are fortunate to have such a diverse population of children in our school community. Each child offers something special. Every time a child shares his or her ideas or relates an experience, a bit of that child’s world view is revealed. This affords an opportunity for peers: to ask questions to gain a deeper understanding of what they are hearing, to relate their own similar thoughts and experiences, or perhaps to build upon an idea. A peer culture is thus being built. One need only watch the many ways children try to communicate with each other when they engage in social interactions to see how the classroom community is constantly being constructed, while a shared sense of belonging is nurtured for each child.

What do we do when there is a child at school who does not seem to make attempts at communication and/or social interaction with peers? During our Fall Quarter Staff Development Day, the Bing Nursery School Staff was privileged to have Dr. Linda J. Lotspeich, Director of the Neuropsychiatry and Pervasive Developmental Disorders Clinic and Assistant Professor at Stanford University Medical School, give an informative introduction to the topic of Pervasive Developmental Disorders. Dr. Lotspeich spoke mainly about Autistic Disorder and Asperger’s Syndrome, two commonly occurring Pervasive Developmental Disorders.

While this article does not have space for a comprehensive definition of Autistic Disorder or Asperger’s Syndrome, the two have some shared characteristics we can examine here. They have in common a qualitative impairment in social interactions and there are often restrictive repetitive and stereotyped behaviors. Qualitative impairment in social interaction can be manifest in a failure to develop peer relationships, a lack of spontaneous seeking to share enjoyment and interests, and a lack of social or emotional reciprocity. Restrictive, repetitive, and stereotyped behaviors can include an encompassing preoccupation with an activity or a topic, and an apparent inflexible adherence to nonfunctional rituals. Specific to Autistic Disorder is a qualitative impairment in communication, which can be manifest as a delay in, or total lack of, the development of language, a marked impairment in conversational ability, and/or a stereotyped and repetitive use of language.

Children who have Autistic Disorder or Asperger’s Syndrome face a specific challenge resulting from the characteristics of their disorder: lack of facility with pretend play. Why is facility with pretend play so important for these children? Pretend play enables children to process what is happening in the world around them—a world in which events can occur unpredictably and without much explanation. Play affords children an opportunity to reinvent the events in their lives and safely alter them as they experiment with roles, rules, and outcomes. Pretend play makes this experimentation possible. Many special bonds between peers are built as children weave their “let’s pretend” lives together.

Dr. Lotspeich spoke about the benefits of including children with disorders on the autistic spectrum in programs like Bing. Children with Autistic Disorder or Asperger’s Syndrome are usually not active participants in pretend play, and the unpredictable aspect of play is difficult for them to negotiate. Children with these disorders need help understanding the unwritten rules of social interactions, along with an opportunity to practice what to do when they find themselves in unfamiliar, unpredictable, and unavoidable situations. When included in a program such as ours, they can

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**Community Gains from Learning About Pervasive Developmental Disorders**

by Joy Davenport, Assistant Teacher
One of the most familiar faces in the classrooms at Bing Nursery School is not that of a child, teacher or parent, but that of one of the researchers from the Stanford Department of Psychology, Vikram Jaswal. Vikram has been a fixture at Bing for the last few years as a “game room person.” While he most often can be found in the classrooms reading a book to children, passing a plate of apples at a snack table, or helping tidy the block area, he has found the time to invite over 270 Bing children to participate in his research study—i.e., his game. With Professor Ellen Markman as his advisor, he has been interacting with the children here in order to better understand how they acquire and categorize language.

Vikram grew up in Lincoln, Nebraska, the son of two professors: his father is a physicist and his mother teaches in theater arts. The youngest of four children, he received his B.A. in psychology from Columbia University, where he studied serial learning in pigeons. After graduation, he received a Marshall scholarship and spent two years studying at the University of Edinburgh. There he earned a master’s degree in neuroscience and studied memory following pediatric brain injury. He came to Stanford in 1997 and is a third-year Ph.D. candidate working with Professor Markman.

The studies that Vikram is currently working on at Bing seek to discover how young children are able to add new words to their vocabulary by ascertaining their meaning through indirect exposure to language rather than by formal instruction or feedback. Children use both linguistic and nonlinguistic clues to form a hypothesis about a novel word’s meaning—a process called fast mapping. Though this initial mapping may not fully represent the function of a word, young children seem to be able to infer the distinction between proper and common names. They usually

As children with Autistic Disorder and Asperger’s Syndrome learn the subtle nuances that govern peer relations, we all have the opportunity to learn how to invite these children to participate in social interactions. Classmates often try strategies such as these: touch him on the shoulder and say “Look at my eyes,” then tell him what you want to say; say that again in a louder voice. We all learn strategies that make our efforts at communication more effective and clear. We all develop a new-found appreciation for what it means to have a chance to be heard. Our community is strengthened as we make space for voices and ideas to be shared by all children. In the process, we gain a deeper understanding of the communities we build in our classrooms, and how we build them, replete with meaningful experiences for all of us.
generalize object labels to other like objects, whereas they tend to restrict proper names to their original referents if those referents are animate. Thus children display sensitivity to both syntactic clues (e.g., presence or absence of an article) and semantic clues (e.g., proper names likely refer to animate objects).

The games that Vikram has been playing with so many children at Bing were designed to answer these questions:

1. **Animacy.** Do young children spontaneously infer that a proper name refers to an animate object?

2. **Generalization.** Do they restrict the use of an indirectly learned proper name to the original referent, or do they generalize to other objects?

3. **Functional strength.** Is their ability to generalize a newly learned label to other objects stronger with indirect learning or direct instruction?

In these games Vikram will introduce two novel toys to a child, one with animate properties and one without these properties (inanimate). In the first game (indirect learning) Vikram will simply ask a child to choose between two newly introduced animate and inanimate toys by referring to the new toy with a novel common or proper label ["a dax" for a common name, "Dax" for a proper name]. The child is then asked to pick among a set of the original object and two others (one of similar and one of dissimilar animacy) for an object using this novel name. (See illustration 1.) What the results of this game have been showing is that children show no preference between an animate and inanimate object when referred to with a common name (a dax), but clearly favor the animate toy when referred to as Dax, the proper name form. In addition, when generalizing the new name among a group of objects, children showed no preference between two objects of like animacy when using the common name form, but showed a distinct preference for the original object over one of similar animacy when using the proper name form.

A second game (direct learning) is played where Vikram does not ask the child to select an object using a dax or Dax, but rather points to an animate object and tells the child specifically “This is a dax” or “This is Dax.” In this game, children were much more likely to use the new name only for the original toy rather than generalizing it to another one like it when Vikram had told them its label using the proper name form. When taking the results of the two games together, Vikram is finding that children are able to infer the use of a proper or common name using only the syntactic clue of the absence or presence of an article.

In addition, Vikram says, “While we began the project focusing specifically on the proper/com-
In this study, the focus is on the relationship between direct and indirect learning. One might expect that children trained on a label will be more confident, remember better, etc. than children who learn the label inferentially. However, the findings indicate that children at these ages are as good at learning words inferentially as directly, and that these results hold up in the face of delays of up to 9 days.

When asked if he had any insight to what the children he has talked with thought of these games they had played, Vikram responded, “Well, one boy gladly went to the game room with me and had a good time. Back in the classroom afterwards, he must have forgotten my (rather difficult) name, as he asked me, ‘Is your name Dax?’”

Vikram’s study has recently been accepted for publication in the journal Child Development.

Stanford Students Come to Class at Bing
by Debbie Whitmer, Head Teacher

Bing welcomes many friends through its double doors every day, beckoning them to come and learn in its beautiful yards. This applies not only to nursery-aged children but to numerous Stanford students as well. Students from many different backgrounds learn about child development and the art of observing children by spending time in the classrooms. Both undergraduates and graduate students come to participate in one of the few remaining laboratory schools in our country.

Many come because of the world renowned research that is being conducted here, while others come to see first-hand how theory relates to practice. They are curious to know more about how the young child truly learns in an emotionally supportive environment. These students have the opportunity to study and engage with the children through the various psychology classes offered at our laboratory school.

A grant from the National Science Foundation and a matching gift from the Bing Family helped to establish Bing as a laboratory for quantitative research in child development, a place for qualitative child study, as well as a base for Psychology classes. The school remains true to its original mission as numerous studies are being conducted in the game rooms and a myriad of Stanford students participating in practicum experiences or refining the art of observation. Psychology 147, Development in Early Childhood, provides a supervised experience with young children in the classroom, supplemented with a weekly seminar. In the seminar, students discuss developmental issues related to the teaching-learning environment. This class is very popular among Stanford students, as they get an opportunity to apply what they learn in their seminar and other classes in the work they do with children. One of the prerequisites to the practicum is Psychology 146, Observation of Children. In this class, Stanford students learn about the children through guided observation. They carefully observe children and reflect upon their physical, emotional, social, cognitive and language development. They learn the intricacies of observation and the art of describing what they see in a detailed manner. Parents and visitors sometimes see these students sitting in the corners of the classrooms rapidly scribbling notes from their observations. Culminating in a child study, this class gives Stanford students the chance to see the development of the children from the beginning to the end of the quarter.
Bing furnishes the site for other Stanford courses in addition to Psychology 146 and 147. Students from other Psychology classes and from other majors come to the school as part of a lab section or in conjunction with some of the many research methods and design classes. Psychology students also have the opportunity to take Psychology 194, Reading and Special Work, or Psychology 195, Special Laboratory Projects, to pursue a special interest of their own in the lab school. These special interests usually relate to something they have observed while interacting with the children at Bing and are overseen by our director, Jeanne Lepper. Other students desire a longer experience and will take Psychology 191 which incorporates a para-professional internship over a two quarter period. We feel very fortunate to be able to provide opportunities for students in other majors to participate at Bing. In the past few years, we have created a forum for Human Biology majors, many of whom go on to become physicians. Students can now take 3Y, a one-unit section of Human Biology 3B: The Human Life Cycle, a core class taught by Professor Anne Fernald. In this class, students observe and interact with the children as well as participate in discussion sections. Many students enjoy this lab section and will sometimes continue their interest by choosing Bing as the site for their Human Biology Internship. Bing also provides placements for the Education Department, for the Learning, Design and Technology Internship, where Stanford students work in the classroom with young children and computers.

The laboratory school is a dynamic setting where many individuals from a variety of fields can learn and grow. Bing brings together children, parents, students, teachers, and researchers to study and think about the best way to promote our children’s learning. Because it is a laboratory school with new students every quarter, the staff enjoys the opportunity to teach not only young children but Stanford students as well. In this same vein, the Stanford students often help the teachers continue to grow, too. It is a challenge and a pleasure to always be looking at things afresh. We all learn a great deal every day not only from the children but also from each other. We are all fortunate to be able to walk through the doors at Bing and have such a beautiful environment in which to learn, grow and develop.

by Madelyn (Mattie) B., age 4

by Noam S., age 4
Because of increased interest in music education, Bing Nursery School hosted a fall quarter parent seminar led by Music Specialist Kitti Pecka on the importance of music in the school and in the home. Kitti addressed the findings of recent research and talked to over 100 parents about the effects of music education on the growing brain of the child.

Current research has found that there are specific areas of the brain used in listening to and making music. Not only are music lessons beneficial to those parts of the brain specifically dedicated to music knowledge, but they have also been found to boost spatial and mathematical intelligence as well. One reason for this is that western music is composed on a model created by early mathematicians that follows the rules of arithmetic. This has been dubbed “The Mozart Effect” by popular science. We use many parts of the brain when making music, and the practice has been proven beneficial to all areas of intelligence. Music learning in itself is held as extremely important in Howard Gardner’s model of Multiple Intelligences. Music intelligence is said to be acquired very early; in fact, writes Gardner in Frames Of Mind, “of all the gifts with which individuals may be endowed, none emerges earlier than music talent.”

It behooves us to capitalize on and celebrate this early development of talent at home and in our early education centers. Making music and responding to recorded music is one of the cornerstones of preschool. We use it to motivate and stimulate the children in many areas of the curriculum. The goal of music education is to:
- Think tunes and sing them accurately.
- Feel rhythms and move to the music.
- Appreciate and respond to the expressiveness of music.

The seminar concentrated on parents performing music by introducing them to some of the repertoire used at school and how it can be used in the home. Some knowledge of music theory is necessary for this education, so Kitti gave a brief lesson in “Music 101,” describing the basic eight-note scale and system of notation for written music. Also discussed was the choice of music: folk music of our culture and other cultures. The rich heritage that we can maintain and the time-tested validity of this choice are of primary importance.

A large part of the evening was spent in singing and “responding” to music. Very little recorded music was used and everyone participated in the music-making session with enthusiasm. Head Teacher Tom Limbert was the able accompanist and assistant on guitar. The songs were mostly familiar but chosen for their enduring beauty and attractiveness to children and adults alike and often for their playfulness, which encourages whole body involvement. Bing has many instruments that have been enhancing the musical experience for children, and some of these, including xylophones and percussion instruments, were demonstrated and available for experimentation after the lecture. Catalogs that are a good source for musical instruments and recordings are available in the office.
As teachers of young children, we have long recognized the vital role music plays in the healthy development of the whole child. In recent years, largely due to the research of Howard Gardner, Harvard professor of neurophysiology, and Don Campbell, author of *The Mozart Effect*, music has been recognized as a unique intelligence, worthy of development and instruction. Edwin Gordon, in his book *The Nature, Description, Measurement and Evaluation of Music Aptitude* suggests that “the most significant effect of music stimulation on musical development appears to be in the first years of schooling.” “Musical education before the age of five,” according to Kitti Pecka, Bing Nursery School’s music specialist, “has been shown to increase the density of the neuronal pathways and synaptic connections between the right and left brain. This and other neuronal coding, advanced by music, will benefit children throughout their lives in higher level thinking skills like problem solving, critical thinking and getting information from one part of the brain to the other.”

Although music has always been an essential part of our curriculum, along with paint, blocks and clay, we were motivated to make music our focus last fall quarter because of the dynamics of our group. From the first day of class, the children in West PM showed an enthusiastic appreciation of music. Music time always drew a crowd: singing, playing rhythm instruments, dancing with scarves to classical music and joining in musical games. In addition, several of our teachers and parents played instruments and were excited to share their expertise.

Our Fall Quarter project, *Making Music: An Investigation of Sound and Music* became a collaborative effort between children, teachers, parents and members of our classroom community.

We began by asking the children what they knew about music. “It’s sort of musicy, instead of talking.”—Paige E.
“All I know is I have a piano and some music books.”—Grant
“We have a piano in our playroom at home. Grandma Laura gave it to us.”—Jackson
“I wish I had a banjo I could take home—a small one.”—Thomas D.B.
“A guitar. You hold on to something and then you go like this—you rub it.”—James
“Guitars make music by strumming them.”—Jesse
“You can dance with music!”—Callie

We nurtured the children’s interest in music. We read books that helped answer some of the children’s questions and give them more information about specific instruments. As a provocation, we put out thoughtfully selected musical instruments on the discovery table each day: rainsticks on a rainy day, an assortment of drums and percussion instruments, metal washboards and a real sitar!
We took photographs of all our classroom instruments and had them developed as doubles to create a musical instrument matching game.

The children joined teacher Matt Linden and his banjo in a marching band, sang along with teacher Nancy Verdizabella at storytime on her autoharp and danced with sombreros and streamers that a Stanford student, a member of the Ballet Folklorico, had created for the children at Bing. Kitti introduced them to improvisational musical games. As the days grew shorter, the children became mice hiding from The Old Grey Cat who came creeping, creeping, ... and as the lights of the holiday season approached, Kitti told them the story of the Nutcracker as they danced with gusto and grace around the classroom with multicolored silk scarves!

“While stimuli of all sorts are useful in strengthening the neuronal pathways of the brain and increasing connectivity, studies have shown that combining music with physical movement greatly enhances it.” —Kitti Pecka

Our focus on music heightened the children’s awareness and sensitivity to the sounds around them, and they began to hear music and make music everywhere! Children and teachers began to sing spontaneously and create their own songs: a song about sloshing in the mud after it rained, a putting-away-the-blocks clean-up song, a going-to-the-moon tire-swing song and a herding-the-hens-back-to-their-coop song! We sang Sea Shanties on the boat, I’ve Been Working on the Railroad on the train, and songs about vegetables in the garden.

The children discovered that they could easily make their own musical instruments from found materials: a tissue box and rubberband guitar, a toilet paper tube maraca, a jingle stick made from a broomstick and metal juice can lids, and a cardboard tube drum. At the woodworking table, we gave the children pieces of wood, nails and rubberbands. They experimented with vibration and tone as they hammered their nails further apart in order to create a higher pitch. We recorded their sounds and played them back for the children to hear. We strung instruments on the monkey bars to create a “hanging orchestra” and took our seventeen homemade drums on tour through every classroom and playyard at Bing!

We gave the children the opportunity to really look closely at instruments as we talked to them about what they observed. Their increased understanding of the parts of an instrument allowed them to draw in detail what they saw. A tambourine, sitar, maracas and autoharp were favorite subjects for observational drawing.

At storytime we came together to sing and participate in musical stories: Over in the Meadow, Tree in the Woods, Abiyoyo, Hush Little Baby, The Gunniwolf, and Zin, Zin a Violin. Mathematics and music melded as we sang counting songs like Five Little Monkeys, Five Green and Speckled Frogs, and Two, Four, Six, Eight, Meet Me at the Garden Gate; clapped out musical patterns, rhythms and beats; and echoed chants. We learned to count all the instruments in a ...
chamber music ensemble, from solo to orchestra. The children incorporated musical instruments into storyplays and made their own sound effects. They guessed who, or what, had made a sound tape recorded earlier in the afternoon and were excited by the variety of sounds they could make with their bodies, from foot stomping and handclapping to whistling and finger snapping. “The more learning modalities that we can utilize at the same time, the more meaningful and permanent the learning.” —Kitti Pecka

The children were fascinated by classical orchestral instruments and began to recognize them, learning their names and the sounds they made. On the computer, Microsoft’s Musical Instrument CD gave them a chance to explore a vast database of instruments from all over the world and to interact with them.

Parents and friends from our classroom community embraced our music project and gave generously of their time and talents. Parents brought in their guitars and played folk songs and rock ‘n’ roll while the children sang along or tap-danced on a “percussion stage” made of hollow wooden blocks. A father brought in his violin and performed a concert of the children’s favorite songs. One of the mothers in our classroom showed the children how to dance the hula accompanied by traditional Hawaiian hula music and made Uli Ulis out of paper plates for the children to shake as they swayed. An older sibling played his keyboard, and the spouses of two teachers from other Bing classrooms played the tabla, a traditional Indian drum, and the accordion. The husband of a West PM nanny turned a small room next to our classroom into a recording studio, recorded the children singing their favorite songs, and then made a CD, West Room Sings, for each child to take home!

At the end of the quarter, the teachers published a songbook of all the songs we had sung throughout the quarter so that parents could sing with their children at home. Making music together—children, teachers, parents, and friends—has helped create a classroom harmony that continues to resonate long after our project ended!

Parents often ask what they can do outside of school to further their child’s musical development. We have included a few suggestions that might be helpful:

- Sing and dance with your child … often! Bev Bos, teacher, musician, and director of the Roseville Community School in Roseville, California implored parents and teachers at a presentation at last year’s National Conference for the Education of Young Children in New Orleans to “Sing songs that will touch your children’s hearts for the rest of their lives. Sing about what they are doing. Sing to the air!”

- Enroll your child in a good music or music and movement class.

- Take your child to concerts and musicals.

- Play tapes or CDs that expose your child to a wide variety of musical styles.

- Invest in some well-made rhythm instruments. Westmusic is a great resource and has a catalog available by calling 1-800-397-9378.

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O ur winter/ spring project, “Stores,” was an exciting learning experience for all involved. The teaching team noticed an interest in this topic when a group of children began to set up a store in the hollow block area on the patio. Others had been “selling ice cream” in the little red house and “fried alligators” off the boat in the grove. Discussions around the snack tables and in our housekeeping area revealed a rich knowledge base about the activities that go on in stores, forms of payment, behind-the-scenes activities, and where things in the store come from.

A sample discussion at the “store” went like this:

B.: OK… I’ll have a slice of cake.

O.: That will be 3 dollars.

E.: Thank you very much. Please come again.

O.: Yes! Yes! Please come again.

You were a very good customer.

O. to E.: What time do we close?

E.: In 10 hours.

E. to B.: Do you want a special coupon for your next visit?

And here’s a gift certificate too.

One child theorized how the store got its supply of eggs: “They [the chickens] leave them right at the door of the store. Then the store people come out and see the eggs. The chicken sees the eggs gone and they bring more until they hatch.”

To help the children further explore their theories and ideas, we embarked on a number of activities. A small store window was set up in the housekeeping corner, facilitating the development of more detailed store scripts—an ongoing focus for teachers and children. Putting this store together and creating supplies for it enhanced play, and also led to many literacy and math experiences. We made grocery lists for lunch items and wrote out receipts and signs. We sorted goods and created money. Our homemade money was used in the dramatic play area as well as in our “Nibble Store” where you could “buy” crackers and juice. We kept daily records of how much money was made in the store. Stanford student Kelly McConnell devised Center Room checks that children could write on and a poster illustrating the cost of items in our store.

Trips to the corner J.J. and F. grocery store were informative. Inside the market we had a tour with John. Groups noticed different things, such as the fish area or the fruits and vegetables. John’s weighing of fruit in the store inspired a sort and weigh activity with our snack fruit. We also spoke with delivery people, who answered children’s questions about where the chips came from and how the bread got on the shelves.

As often happens on field trips, teachers learned that the children were as curious about unintended diversions as by the object of the trip. In this case, the laundromat next door to the market proved fascinating. Ultimately we did a load of wash there, discovering that you can buy the use of certain machines that you may not have at your house.

The culmination of this project was the opening of our own juice store, visited by members of the entire school community. The children put together the whole operation. They made signs and invitations that were delivered to all AM children’s mailboxes, announcing when the store would open and what “money” would be needed. They selected flavors, mixed concentrate, poured and organized our “product.” Children who wanted to serve our customers signed up for a certain “shift.” It was a most exciting two days, seeing their pride and competence in running their store.

A number of parents mentioned that their children had been playing elaborate “store” games at home—a good sign that thinking was going on beyond school mornings. Just last week we discovered a new sign stuck in the store window—“NIRVYN” for Mervyn’s—so the play continues ….
Center PM’s Clothing Project: A True Community Effort

by Tom Limbert, Head Teacher

When I came to Bing four years ago, I was fortunate enough to have previously worked in two university-based laboratory nursery schools. I was already aware of the tremendous potential for learning that lab schools offer children, parents, teachers, and everyone associated with these communities. It was not until I came here to Bing that I learned about project work with young children, though. Certainly I had read and heard much about Lilian Katz and her influence on early childhood education, but it was here at Bing that I was able to see her approach to project work take on life and become an integral part of the classroom experience. I have had the pleasure of taking part in many successful projects, exploring such exciting topics as butterflies and fish as well as equally meaningful topics like families and story plays. This fall in Center PM, we embarked on a project involving clothing and, thanks to a genuine community effort, we found the study of this topic to be incredibly rich and worthwhile for all involved.

In their book Engaging Children’s Minds: The Project Approach, Lilian Katz and Sylvia Chard outline the criteria from which teachers of young children can select the content of a project. As they explain, the primary criterion for selecting a topic is relevance of the topic to the children’s lives. Certainly the topic of clothing qualifies as a relevant topic for children. Our team of teachers originally got the idea when we noticed a gathering of children at the self-help table surrounding a child as she carefully cut out a paper dress that she then taped onto a self-portrait she had drawn. We talked about the children’s natural interest in the event and considered a long-term project on clothing. We were excited about the fact that the topic was universal and indeed a major part of the children’s everyday lives. In short, a project on clothing seemed to “fit” our classroom quite well.

The second criterion for selecting a project topic that Lilian Katz and Sylvia Chard discuss is the availability of materials and equipment. Here again, clothing certainly seemed an appropriate and feasible topic to be explored at Bing. The clothing the children wore to school every day provided ever-changing occasions for discussion and continuous opportunities for learning new vocabulary and concepts. What better time to talk about how wool comes from sheep than when a child arrives at school wearing a wool sweater? The children themselves provided ample “materials and equipment” for an extended project on clothing. Our team of teachers was also delighted to find additional materials and equipment within Bing that helped to make our project more fruitful. We had to look no further than West Room’s shed to find washboards and an old-fashioned wringer that became part of the children’s process of washing and drying clothes at school. Bing also has a sewing kit complete with plastic needles, yarn, and various fabrics that enabled children to work on their fine motor and concentration skills while learning more about clothing. In the teacher’s workroom we found a variety of materials and fabrics of all colors and styles to further enhance the children’s experiences with clothing. Using these materials, we were able to work on concepts such as color.
identification with some children, while other children were able to sharpen their cutting skills or learn the names of different fabrics and patterns. The teachers in Center PM did not have to travel far from our very own classroom to find a plethora of materials and equipment for our clothing project. Katz and Chard see “resources within the school and in the local community” as the final criterion for selecting a project topic for young children. The single most accessible and valuable resource that we found to help make our clothing project successful and truly meaningful for the children in our classroom was the people that make up our classroom community. The children themselves provided the spark for the entire endeavor while continuously providing us with the questions and ideas that shaped our study. The teachers in our classroom provided ideas and energy as well. Teacher’s ideas came mostly in the form of classroom activities involving clothing. Teachers were also able to find additional resources such as informational books, stories, and songs involving clothing to share with the children and help our project encompass our entire classroom. The Stanford students who worked in our classroom in the fall were an additional and valuable resource. Jennifer Champion made a clothing puzzle for the children that matched articles of clothing to the material they came from. Katherine Orr brought in a weaving loom and let the children take turns weaving.

Perhaps the greatest and most meaningful resource of all was the many parents who took the time to visit our classroom and share their knowledge, skills, and experiences of clothing. Thanks to the parents in our classroom, the children were able to try their hand at knitting, using a sewing machine, sorting socks by color and size, making folded origami shirts, and cutting out paper dolls of children dressed in clothing from all over the world. At storytime, one family showed the clothing that their baby wears while several parents came to show what they wear to work. This exceptional involvement by the parents helped to make the project a true success and was genuinely appreciated by both the children and the teachers in our classroom.

The “culminating experience” of our clothing project came on a Wednesday in January with a visit from three members of our local community who work in a fabric boutique. The children were enthralled to see an actual spinning wheel at work before their very eyes. They also got to see a man using a spindle and were provided with another opportunity to use a weaving loom. Although this visit served as a valid and worthwhile “culminating experience”—an important part of Katz and Chard’s project approach—our journey has not ended. The simple truths that the weather will continue to change and the children will continue to grow dictate the fact that our clothing project will continue as well.
In the spring of 1999, with the help of Stanford student Ari Fernández, children in West Room incubated hens’ eggs and hatched eleven chicks.

The chicks grew rapidly and were soon ready to move outdoors. Our carpenter Wilhelm built a coop and hen house, and feeding and caring for the chickens became a regular, taken-for-granted part of our classroom routine.

Then, in November children found the first egg! This exciting event prompted an intense interest in the hens that is still as strong today. The children check the nesting boxes morning and afternoon and record how many eggs they find.

Visitors come from Center and East rooms to see the hens, gather eggs for cooking, and bring worms to feed to the hens.
The children’s curiosity led us to research some questions that either puzzled or interested them.

Do hens have ears? by Anna B., age 5
Some children were not convinced that the rudimentary ear really is an ear! However, the children who have studied the individual features of the hens’ heads to do observational drawings and paintings have found out that yes, they do.

Can hens fly?
To begin with, there was uncertainty as to whether hens even had wings. But then children observed them occasionally spreading their wings and flapping a little. The teachers encouraged the hens to perch on the climbing equipment and the railing of the bridge so children could observe how they would get down. Children noted that the hens jumped more than flew. Then Teacher Mark lifted a hen onto a tree branch and it did fly down!

Why don’t the hens have names?
Over a period of several weeks children made suggestions. We made a chart and children voted for their favorites. West AM voted for Henny and West PM voted Penny.

What can you cook with eggs?
Children have become adept at cracking and whisking eggs. The favorite part of cooking activities is breaking the eggs. Fried, scrambled and hard-boiled eggs have been evaluated, fried eggs being rated the best.

Henny and Penny have become an engrossing topic that has created great enthusiasm for learning more about hens, cooking with eggs, and caring for animals. Raising hens in our West Room yard is continuing to provide deeply satisfying work for both children and teachers.
Most art experiences for young children involve production via the use of materials, such as clay or paint. However, young children can also benefit from art experiences focused primarily on perception—that is, from encounters with art created by others. These experiences require a kind of thinking that expands young children’s cognitive repertoire and the ways in which they can come to know the world. Children see that there may be multiple solutions to a problem or different ideas and perspectives about a particular work. This, in turn, encourages a more open-minded and empathic relationship to the world.

With that in mind, our East AM class began visits to the Rodin Sculpture Garden in July of ’99 and continued visiting regularly, experiencing the magic of this incredible exhibit. On our outings, children, parents, and teachers set off from Bing in small groups to ride the Stanford shuttle bus, Marguerite, to the Cantor Arts Center. Simply being outside the walls of the classroom gives the children a broader sense of the school community. The ride on the Marguerite is one of the highlights for many of the children. Recognizing the many sights of Stanford, particularly the Hoover Tower, always provokes great interest. Children also get very excited when they notice a parent’s workplace or one of the many construction sites on campus.

At the Sculpture Garden there is so much to experience: the size, shape, and texture of the artwork; the rocks under the sculptures; watching the sculptures being washed; and finding Rodin’s name on his creations—just to name a few. Parents and teachers wander through the works of art with the children, helping to guide their experiences with pertinent questions and validating their thoughts and opinions on the art around them.

Children were asked:
What is a sculpture?
Some of their replies were:
“It doesn’t move.”
“They’re very still and look like they are doing stuff.”
“They’re made out of rocks.”
“They’re made out of stones.”

Another question was:
What about this one [Head of Pierre]? What do you think?
More replies:
“He had only a face and a neck.”
“He was real, but after he died he was in clay.”

Another question was:
What about this sculpture [by DeKooning]? It’s very interesting; it takes up a lot of space.
“Oh my! Look how big it is! It’s like a hundred feet.”
“A bear.”
“It looks like a bear.”
“It’s like a horse or something.”
“It’s metal and it’s black and can be all different things.”
“Maybe it could be a tree, but not real.”
“Something out of stone.”
“It’s made out of metal.”
“It’s made out of clay.”
“Metal is glass.”
“I think sculptures are made of clay and sticks.”
“It feels hard.”
“It looks like an elephant. It has a trunk.”
“It’s big. A spider web.”

At the end of each trip the children have time for a snack and a chance to work with clay. As our trips to the Garden become more frequent, the children’s work becomes more representative and influenced by the sculptures they have viewed. Most recently, we captured the children’s ideas about what they were creating:

“IT’s a lady standing on a rock.”
“I’m making a walkway to walk over the lake. A circle. A cake with a hole. But no water ‘cause the water died.”
“I’m making rings.”
“I’m making a snake.”

Hannah W. using clay with her father.

Back in the classroom the children are developing a keen interest and pride in clay work. Children are taking time to create sculptures, which are proudly displayed throughout the classroom. Playing “freeze tag” takes on a whole new meaning as they “freeze” like a statue.

We will continue taking regular advantage of this wonderful access to the world’s second largest collection of Rodin sculptures. Through such repeated visits young children can begin to experience deep conceptual learning. However, trips like these could just as easily be taken to view other local pieces of public art—statues in the park, murals on outdoor walls, art in municipal buildings, public gardens, or local architecture. All these are similarly meaningful for encouraging the aesthetic sensitivity of our children. Our project on experiencing art also teaches that children and adults alike need not experience art only in a “hushed and hallowed” venue or manner. Art is everywhere in our daily lives, from the shapes in the clouds to the framed paintings on the walls.

Drawing of the toes of a sculpture.

by Ella F., age 4

East AM children at the Rodin Sculpture Garden.

August 2000
East PM Explores the Wonders of Nature

by Chia-wa Yeh, Head Teacher

The natural outdoor environment in East Room yard has spawned many explorations and discoveries. We have found that the nature in our very own yard provided the children and adults with many wonders. In winter, finding worms in the yard was a favorite daily activity for many children. As the rain subsided and with spring approaching, the children found different kinds of caterpillars. A true wonder and rarity was a hummingbird’s nest in the redwood tree by the classroom. Although the hummingbird family has moved on, we cherish our memory of visiting the two baby hummingbirds. Having observed the children’s strong interest in nature, we decided to make the study of nature our project. It involved not only the children but also parents and Stanford students participating in the classroom.

Silkworms
The children had the opportunity to witness the entire life cycle of silkworms on the Discovery Table inside. Sue Gore, a teacher from the East AM team, thoughtfully set up the display. When the child-

“...The baby silkworms are getting bigger to spin cocoons. I see a lot of moths and cocoons. That moth up there is waiting for a friend.”—Samantha

In addition to the silkworms’ development, the children also witnessed the metamorphosis of some painted lady butterflies. The children watched with amazement as the caterpillars transformed themselves at different stages and finally emerged as butterflies.

Modes of Representation
Drawing, painting, modeling with clay, and building with blocks are powerful ways of representation for the children. The children painted pictures of flowers and insects at the easel by the garden and at the art table. They closely examined the details of insect and arthropod models and did observational drawings. These models were available for the children to manipulate. Some children used these insect models to...

by Ji Won Y., age 4
engage in dramatic play. Some built block structures. One example was a collaborative effort among four children to build a “bug house.” The house was an enclosed structure made from blocks complete with roof to prevent the insects from escaping. It was as tall as the children! The children made a sign stating “Only for Bugs” and taped it on the house to notify the rest of the class. The children also used clay and playdough to make their own insects and arthropods.

**Parents as Resources**

Parents are often our best resources. We work toward building a partnership with the parents and highly encourage them to share their interest and talents or simply to spend a day at school. Charlie’s mother, Courtney, offered to bring in some insects and arthropods. A biologist by training, Courtney is an outreach educator for the Palo Alto Junior Museum where many animals are on display. The walking stick, millipede, red-kneed tarantula, and hissing cockroaches Courtney brought fascinated the children.

Some of the children’s comments and questions are:

“Hey! Don’t hurt those bugs! Are they slimy? This is a real tarantula and it’s poisonous.”—Jason

“What does that bug do? I will never never touch a tarantula. See? It’s alive. Don’t touch it! It’s poisonous. I’m allergic to cockroach.”—Jonathan

“They look like giant roly polly [referring to the millipede].”—Sammy

“A millipede? What’s a millipede?”—Stephen

“It has one hundred and three feet. This guy is moving a lot but not going anywhere. The walking stick is pretending to be a scorpion. It’s sticking up its tail.”—Alexander

“You see the little waves it’s doing [referring to its feet]? It’s sticking on it. When it walks, he makes waves. That’s how he walks. Look! His head is going this way and his tail is going that way.”—Sam, holding the millipede

Several members of the family are supportive of the project. Gavin’s mother, Janet, led dance and creative movement with the children. She played a tape with insect and animal sounds. As the children listened to the sounds, they improvised and moved like the insects. Gavin’s grandmother, a former art educator, prepared an assortment of fruits and vegetables for the children to create their own edible insects and arthropods. For example, some children used pretzel sticks as legs. Gavin made a grasshopper using parsley. The children made colorful collages and sculptures using small cut-out balls of melon, sliced red peppers, round purple chips and other foods.

Beth Y. and Victor H. making observational drawings from insect and arthropod models.

Charlie T’s mother, Courtney, hands a millipede to Sam G. while Charlie and other children watch.

Charlotte M. handling a walking stick.

Photo not available online.

Derek C., age 5

Observational drawing of millipede.
Jeremy Smart and Corrine Purtill, two of our Stanford Psychology 147 students, incorporated the children’s interests into their classroom project for the seminar Development in Early Childhood. Jeremy’s project employed more than one sensory experience. He made a matching game using pictures of insects and birds. In addition, he compiled a CD with sound clips of insects and birds. The children were drawn to the appealing pictures as well as the sounds. When playing the game, Zachary said, “That’s a horrible, a horrible sound [bee]. I like this sound. It’s beautiful [cricket].”

Corrine wrote and illustrated a picture book about insects. The children also dictated their own stories to her. The following are some examples of their insect stories:

“Once upon a time, there was a number 12. And a boy came and there was a loud noise from the bushes. And do you know what popped out of the bushes? Giant bugs! They cooked warm soup with chicken for each of the bugs. And they went in their castle and they stayed in forever. And Scooper digged the sand and the other bug was trying to get the sand in the middle. The End.” —Avner

“Once upon a time, there was a dragonfly who was playing with his other friends and then a mosquito came along and bite off his two wings. And then, another dragonfly came along who had a lot of magic and the red dragonfly made the other dragonfly have some more wings! The End.” —Stephen

“June Bug” by Samuel S., age 6

“Watermelon” by Charlotte M., age 4

“Planting”

The children planted sunflower seeds, watermelon seeds, and vegetable seeds in cups to take home, thus creating a link between home and school. Some parents and children report that their seeds have indeed sprouted. The children also planted flowers in the two window boxes of the playhouse in the neighborhood.

The wonders of nature abound in our yard and we continue to explore, investigate, and delight in discoveries every day. One day Agnes wondered why butterflies are afraid of people and then answered her own question: “Because they come from the wild.”
The children’s eyes darted back and forth, tracking the swift movements of the tadpoles at the bottom of the fishbowl. With every passing week, the children in the Two’s classes monitored the tadpoles’ progression from water to dry land, including the development of limbs and loss of tail. Children also witnessed an insect metamorphosis, as they followed caterpillars through pupation, chrysallization, and emergence as butterflies.

This spring quarter through the Metamorphosis Project, we investigated the life cycles of these creatures, engaging the children’s curiosity about life cycles, physical growth, and development. As evidenced by their observational line drawings, the children discerned the key features of “tadpoleness”: a rounded body and a long, wiggling tail. Working with teachers on puzzles to sequence the stages of the frog and butterfly life cycles, the children learned about logical progression. Books, songs, and music and movement activities complemented the observational learning. In addition, parents and researchers collaborated throughout the project to help the children make sense of the physical changes involved in the metamorphoses. The project culminated with a butterfly release celebration. Led by Kitti Pecka’s singing, the children waved to the butterflies taking flight from the Two’s yard.

During the year, the children in the Two’s class began to separate from their parents, gained social awareness, engaged in cooperative play, and formed friendships. Their development was just as wondrous to us teachers as the metamorphosis of the tadpoles and the caterpillars was to them.
In November 1999, Bing staff had the opportunity to attend the annual conference of the National Association for the Education of Young Children. The NAEYC is a professional organization for educators whose membership includes teachers, college faculty, and public policy makers in the field of early childhood education. The association is committed to creating developmentally appropriate programs for young children and to advocate the professional development of teachers and administrators. The annual NAEYC conference is the largest educational conference in the United States. It is a wonderful opportunity to meet colleagues to share ideas and research. Six staff members from Bing—Teachers Nandini Bhattacharjya, Nancy Howe, Kitti Pecka, Parul Roy, Chia-wa Yeh, and Assistant Director Beverley Hartman—attended a variety of interesting and educational sessions regarding research and technology, health and nutrition, curriculum, and music over a period of three days in New Orleans. As in years past, the conference reassured us that our efforts as teachers make a difference in the lives of many children.

Parul Roy, Nancy Howe, and Chia-wa Yeh attended an inspiring workshop with Bev Bos, who is a legend in early childhood education. Her presentation was charged with energy, enthusiasm, and humor. Ms. Bos’s thirty-five years of teaching experience have made her an expert on inclusion and acknowledgment of children’s differences. These differences were discussed in the context of music and children’s play.

As the presence of musical intelligence is apparent in children from birth, Ms. Bos believes that music should play an important role in children’s lives. Therefore, she encouraged us to “sing, sing, sing,” and to explore sound without fear or restriction. In early childhood, learning takes place in children’s play. Ms. Bos believes that concrete learning cannot take place unless it has been experienced “in the hand and body.” Her ideas about learning reinforced what we do at Bing by providing extended periods of time for children to explore. Bing exposes children to varied materials in play, so they can gain knowledge of the world in which they live. Ms. Bos closed the interactive session with a quote from Bernard Shaw, “We do not cease to play because we grow old, we grow old because we cease to play.” Through singing and the exchange of ideas, Ms. Bos gave the attendees a sense of belonging, which is something we want to provide for all children.

Another informative session Parul Roy attended carried a similar theme about differences and described how we as teachers can play a vital role in understanding and supporting these differences in the classroom context. Diane E. Strangis, Assistant Professor at the University of Florida, offered a workshop entitled Challenges and Supports for Early Childhood Teachers Whose Classrooms Include Children with Autism. Her research questions were focused on the impact of preschool tasks on children with autism. She also discussed the things that were frustrating as well as helpful for the teachers in settings that include children with autism. Some of the central findings of her study were that teachers in early childhood settings felt that autistic children can successfully participate in a preschool setting, given appropriate adaptations. Establishing a trusting relationship and open communication with the parents of these children creates a strong support system for success. In addition, she suggested that adults who work with these children such as speech therapists and psychologists, need to use methods consistent with those of other adults in the child’s life.

Nandini Bhattacharjya and Kitt Pecka attended several interesting
sessions. Elizabeth Jones of Pacific Oaks College presented an interesting workshop on friendship as an emergent curriculum in preschool settings. This talk focused on different ways teachers can help children discover their friends in the classroom. Elizabeth also highlighted various ways parents and teachers can collaborate to help children turn these first social connections into strong friendships. The elements of this presentation strongly reinforced the methods of social play encouraged at Bing School.

Teachers who interact with children who have life-threatening allergies require special training to recognize and deal effectively with potentially hazardous allergy-related situations. This was the subject of a talk entitled, *No Peanut Butter, No Milk: What is a Program To Do? Managing Life-Threatening Allergies in Early Childhood Programs*. Cassandra Piper and Helen Rebull from Virginia presented different methods teachers can use to help such children and their families feel comfortable and safe in preschool settings. A number of resources for educating teachers on safe foods and safe recipes to use in classrooms were presented. The attendees were trained in first-aid procedures and instructed on the appropriate course of action for various types of allergic reactions.

Dr. George Forman, Professor of Early Childhood Education at the University of Massachusetts, Amherst, presented some of his ongoing research. It entailed the use of video recordings of children’s activities, which were then shown to the children. When he played back the recordings to the children, he asked them questions about what they were thinking while performing the activity. A number of examples of children’s responses to his questions were presented. The objective of his work was to study ways to help children become more conscious of their actions through recall and reflection. At the end of the talk, Dr. Forman proposed using such techniques in future research to enable us to learn more about how children think.

Kitti Pecka attended conference sessions that were music-related. The music presentations included topics such as current research on music and emotions as well as the cultural impact of music. A bright spot was the presentation of Ms. Ella Jenkins, who has been teaching for fifty years! Much of what she teaches is derived from the rich American melting pot of melodies and rhymes, but she also borrows from other cultures. Ella’s most recent CD is based on the theme of Union and utilizes labor songs of the Twentieth Century and concepts of working or playing together. Kitti respects and recommends Ms. Jenkins’ work for both young and old. Another presenter was a local Cajun children’s music teacher and performer called “Papillon.” His tunes were genuine folk songs that were peppered with slang and concepts of romance, but are occasionally appropriate for the very young. “Sugarbee, Sugarbee” is a song that Kitti learned from Papillon, that she plans to sing with the children for many years!

While we attend conferences to keep abreast of the latest development in early childhood education, our colleagues at Bing also participate in making presentations at state and national conferences to exchange our experiences with other educators. This year, Chia-wa Yeh presented a workshop entitled, *Technology at Work for Early Childhood Educators: Ways to Enhance Parent Communication and Support Curriculum*. (Please see page 31 for more information.)

The NAEYC conference presented a wide range of topics, and we were enthusiastic to have the chance to attend. This conference has enriched our experience and will help us bring new ideas to our colleagues and to the children of Bing Nursery School.
Staff Development Day—Winter Quarter

by Sue Gore, Teacher

While discussing upcoming school events with an East AM child, I asked him about his understanding of Staff Development Day. He said, “It is a time when teachers find out about what children want to learn.” How astute! Staff Development Day on Tuesday, February 22, 2000, was an opportunity for staff to discuss, reflect on, and expand our thinking about how we work with children. The day included formal presentations by colleagues and a guest speaker, as well as informal time to visit our classrooms and review the documentation in each room.

Our Role as Mentors
Debbie Whitmer, Instructor, and Jessica Murray, Teaching Assistant, guided us in a discussion of Our Role as Liaison Teachers with Stanford students enrolled in Psychology 147, Development in Early Childhood. When Debbie asked the current group of students what was beneficial to their integration into the classroom, they said that written dialogue with their liaison teacher in weekly journals was most helpful. Through clear responses to journal entries, we are able to answer questions, integrate teaching philosophy, express our mission as a laboratory school, and represent developmentally appropriate practice as it applies to the student’s classroom experience. As a staff, we reviewed journals that Debbie and Jessica selected from the archives. The exemplary written responses from liaison teachers served to guide students through issues such as limit setting, exclusionary play, appropriate level of teacher interaction, and facilitation of problem solving. Additional journal samples provided grist for lively small-group discussion as we co-constructed journal replies to enhance the student’s understanding of our work with children. This opening presentation highlighted important aspects of the liaison teacher’s role in mentoring Stanford students who contribute to the enrichment of our program at Bing.

Jared Curhan on Social and Negotiation Skills

Another highlight of Staff Development Day was guest speaker Jared R. Curhan, B.A., Harvard College, who detailed the history and mission of The Program for Young Negotiators, Inc. (PYN). He is currently a fourth year Ph.D. student in Social Psychology at Stanford University, and is Founder and Board Member of PYN, a national nonprofit organization dedicated to teaching negotiation skills to students in primary and secondary schools. Curhan has received fellowships from the National Science Foundation and the Stanford Center on Conflict and Negotiation. His research focuses on three basic areas within the field of negotiation: (1) how preferences change during a negotiation process; (2) the nature of negotiation in close relationships; and (3) the acquisition and use of negotiation skills by children.

Curhan said that as a young boy, he was the source of relentless teasing by the class “big bully.” That lesson of humiliation at an early age fueled his passion to help young people, their teachers, and other mentors use negotiation as a powerful means of dealing with problems and achieving their goals. Put in simple terms—to get what you want without violence.

In 1993, Curhan developed a negotiation curriculum for middle school children, which was field-tested over a ten-week period in the Boston area. Via videotape documentation, we saw children grow in their negotiation skills through role-playing, coaching, collaboration, and rethinking their patterns of dealing with problems. A trained teacher guided children through the steps to negotiation:
Discerning the parties.
Defining positions.
Determining perceptions of the situation and interests at stake.
Creating back-up plans.
Coming up with fair standards.
Projecting creative options.

Curhan said that the outcome of this pilot program, teaching critical thinking skills to seventh graders, was a lower rate of detention and physical violence. He remarked, “The appeal to kids is that we are teaching them skills to help them get what they want.”

Curhan’s recent book, Young Negotiators (1998, Houghton Mifflin), has been used to teach negotiation skills to more than 10,000 middle school students in the United States, and has been translated into Spanish, Hebrew, and Arabic. He previewed the book he is currently finalizing for younger children, ages 6–10, and exchanged ideas regarding the adaptation of the negotiation program for children of Bing School age. In conclusion, we agreed with Curhan that empowering children with critical thinking skills is a goal worth pursuing.

Technology as a Tool for Teachers

Computers in the classroom have become an engaging tool for extending literacy curriculum. Chia-wa Yeh, Head Teacher of East PM, presented a summary of the workshop she gave in New Orleans last November for the Conference of the National Association for the Education of Young Children (NAEYC). Her topic, Technology at Work for Early Childhood Educators, focused on ways to enhance parent communication and support curriculum through computer-generated materials.

Chia-wa described scanning techniques to incorporate photographs of children and their work in newsletters and keepsake brochures linking home and school. She emphasized the importance of the digital camera as a vehicle for enhancing documentation. Chia-wa utilized digital photographs and interactive software available for the iMac computers in our classroom to develop “slide shows” of field trips, project work, and images of classmates that children view with a click of the mouse.

She then described an extension of the use of digital photographs in the literacy curriculum. Children in East PM created “mailbox doors” by matching names and faces printed from the computer. These were attached to the mailbox located near the writing center and remain a favorite place to send and receive mail from friends, thus fostering early literacy and social interaction.

Chia-wa concluded with a demonstration of technology as a tool of collaboration with parents. During the classroom celebration of Chinese New Year, digital photographs and videos were taken to record the day’s festivities culminating with the “Dragon Parade.” An East PM parent took the organized raw data and produced a video documentation that was viewed during large group time. This videotape remains a memory link for children to revisit the day’s events and to share with others in the the East Room community who were unable to attend. Through innovative use of technology, both curriculum and parent communication were enriched.

Skill and Artistic Media

As Staff Development Day continued, Jane Farish, Teacher in West AM, and Carolee Fucigna, Head Teacher in Center AM, explored the topic How Children Develop Skill with a Medium in Order to Use it as a Language of Expression. This presentation was first given at an Innovative Teacher Project Roundtable at Mills College in January.

After observing the advanced representations produced by children from Reggio Emilia, Italy, now on display in The Hundred Languages of Children Exhibit at Mills College in Oakland, educators wonder, “What does it take for children to get to this level of expression?” The question evoked a meaningful discussion among staff regarding the way we introduce materials in the classroom and how we support a child’s developing skill.

First, Jane and Carolee offered some background information. The expression “The Hundred Languages of Children” came

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into our vocabulary in the late 1980’s from the thinking of Loris Malaguzzi, founder and inspiration for the preschools in Reggio Emilia. He used the phrase when referring to “the wide range of ways children communicate and represent their understandings, feelings, and creative selves. These languages can be written and spoken words, drawings, paintings, sculptures in clay and other materials, block constructions, drama, movement, dance, music, computers, and more.”

Further, George Forman, an educator from the United States who has studied the schools of Reggio Emilia, asserted, “A language is more than a set of symbols. A language contains rules of combining these symbols to convey meaning.” He suggested that a child has to learn the affordances (i.e., physical properties) of a medium before she can make it a language.

Through slides and discussion, Jane and Carolee explored with us the affordances of several media including collage, clay, easel painting, and drawing. In addition to learning the physical attributes or affordances of a medium, Jane emphasized that children must develop technical skills to use it successfully, such as holding a pencil or using scissors. In fact, the skills and affordances cannot be isolated. They are in a dynamic relationship. A child’s mastery of the affordances and skills of a variety of media add to the child’s repertoire of expressive languages.

In conclusion, we exchanged ideas about the role of the teacher in helping children learn the affordances of a particular medium and acquire the skills to represent their ideas successfully.

- The teacher observes, listens to, and understands the tension/dilemma of the child between what she wants to do and what she can do.
- The teacher presents basic materials in a logical sequence allowing time for the child to explore and become familiar with a medium… repetition to mastery.
- The teacher, at times, becomes the “third hand,” offering support with emerging skills. Loris Malaguzzi explained, “It is sometimes required that teachers lend the children some of their knowledge and skills so as to help develop the children’s ability and willingness to use their many potential languages.”

This provocative discussion has promoted a continuing dialogue among staff as we carefully prepare the Bing environment to foster the development of expressive languages.

Staff Development Day provided a forum for stimulating discussion with colleagues and the opportunity to continue the process of learning, rethinking, and growing in the way we work with children.
Our spring quarter staff Development Day proved to be both informative and insightful. It consisted of one staff presentation, and two guest speakers, and an in-depth discussion among all the teachers and administrators.

Kindergarten
With parent-teacher conferences approaching, it seemed quite fitting to start our staff development day with a presentation and discussion about some of the kindergarten programs our parents were then considering. This session was led by Tom Limbert, Head Teacher, and Nandini Bhattacharjya, Teacher. In preparation for this discussion, Tom and Nandini visited seven different kindergarten programs in our area.

Tom and Nandini’s observation of kindergarten led us to conclude that Bing Nursery School provides good preparation for kindergarten. Similar to the kindergarten setting, Bing has group times, provides many opportunities for child-directed activities as well as teacher-directed ones. The children at our school have a spectrum of needs that will be amply met by the schools in our community. Tom and Nandini strongly encourage parents to visit kindergarten programs in the fall so they can see which program(s) might be appropriate for their child.

After Tom and Nandini’s presentation of specific kindergarten programs, Tom discussed “kindergarten readiness,” describing some specific characteristics and behaviors that usually indicate a child’s readiness to move beyond nursery school.

The following are some of these indicators:
- Child demonstrates an interest in writing.
- Child can firmly separate from parent/guardian.
- Child demonstrates an interest in letters.
- Child can make friendships and wants to be with peers.
- Child demonstrates impulse control.
- Child has developed self-esteem to the point where s/he can take risks.
- Child can verbalize needs and feelings.
- Child self-selects own activities.
- Child self-directs own activities.
- Child’s parent(s)/guardian(s) are ready to let go.

The information in this presentation proved to be valuable for the new teachers at Bing and a nice refresher for the more experienced ones. We are very grateful for the time and effort spent by Tom and Nandini to put the presentation together.

John Gabrieli on the Biology of Reading and Attention
We next heard from our first guest speaker, John Gabrieli, Associate Professor in the Stanford University Department of Psychology. Professor Gabrieli received his Ph.D. in behavioral neuroscience from MIT and is currently studying the neural basis of memory, perception, and cognition as revealed in experimental analysis and brain imaging. Professor Gabrieli presented recent research, examining the differences between normal individuals and individuals with difficulties in these areas.

Professor Gabrieli emphasized that a child’s crucial time for learning and development extends beyond the first three years of life. It is a common misconception that if you have provided a child with a rich learning environment up to this point, then your work is basically done. Likewise, it has been assumed that if a child has not reached a particular developmental level by the age of three, then it is too late for the child. Professor Gabrieli was quick to erase these myths, insisting that we not give up on...
our children if they have not developed as expected in their early years. In support he cited and discussed a recent book by John T. Brueer called *The Myth of the First Three Years*.

According to Professor Gabrieli, the development of certain characteristics is simply a random occurrence. For instance, a child’s inability to draw well should not be cause for worrying about the child’s future accomplishments or for medicating the child to correct the “problem.” Some children are good at drawing and some are not. Professor Gabrieli extended the example by asking, “But what if the trait is reading or paying attention?” Professor Gabrieli likened the parent of a poor reader or a child with attention difficulties to that of the poor artist and said these parents should not be worried or medicating their child as a response. He affirmed that reading and drawing skills stemmed from a person’s biology. It was at this point that the Professor began to describe just how he and his colleagues have been studying these characteristics in young children.

Professor Gabrieli and his colleagues study the roots of reading and attention. They use functional magnetic resonance imagery (fMRI) to determine what parts of the brain are active during different activities. When a person engages in a mental task, the area of the brain responsible for this process receives additional blood. Using fMRI gives researchers the ability to detect which areas of the brain are receiving this additional blood supply and are thus being accessed for a specific task. Such studies are revealing a biological basis for attention deficit hyperactivity disorder (ADHD) and dyslexia.

Professor Gabrieli is currently studying the brain activity of ADHD and non-ADHD children who are both on and off of Ritalin, the most common medication given to children diagnosed with ADHD. The results are indicating that Ritalin can help children with and without ADHD inhibit certain behaviors, although it helps the ADHD children much more, to the point where they can perform as well as their non-ADHD peers. A puzzling finding is that a certain brain area of ADHD and non-ADHD children responds in opposite ways to Ritalin. Given this unexplained result, Professor Gabrieli emphasized that it is best to medicate only those children who truly have ADHD or ADD (attention deficit disorder). Unfortunately, he observed, the means of diagnosing ADHD and ADD are highly subjective and inexact, and increasing numbers of children are receiving the diagnosis.

Professor Gabrieli also uses fMRI to study dyslexia. This impairment is not related to visual perception, but rather to a weak system by which a child learns and understands the spoken language: dyslexic children have difficulty hearing the sound of language and then associating it with a specific letter. Our brains are not prewired to read, as they are to speak and to see. In fact Professor Gabrieli said reading is a “very unnatural process [that takes coaching and guidance] to work successfully.” The use of fMRI is clarifying that children with dyslexia are using different areas of the brain to read than are non-dyslexic children.

Among his practical goals for his research, Professor Gabrieli hopes to be able to predetermine which children will learn to read “the wrong way” and provide them with assistance and help before they learn to read in a way that is not only disadvantageous, but incompatible with their brain configuration. Traits such as dyslexia and ADHD are “variations on a biological spectrum.” Reading and paying attention happen to be traits that are valued and promoted by our culture. They are not biological predispositions. Our teaching and parenting responsibilities, Professor Gabrieli concluded, include “rescuing children who drew short sticks in the biological lottery.”

**Bev Bos on Wonder and Learning**

Our final presentation was given by Bev Bos, an expert in child development for over 30 years, the author and editor of several books on child development, and a speaker in high demand all over...
the United States. Ms. Bos develops and refines her innovative ideas about child development by teaching at her own nursery school, Roseville Community School in Roseville, California. Her topic was “Engaging Our Children’s Minds—Wonder, Discovery, and Experience.”

Ms. Bos explained that the first basic focus for a child is wonder—that is, astonishment, surprise, admiration, and “doubt mingled with curiosity.” “Childhood is about mucking around,” said Ms. Bos, and these experiences are the ones children need and will attach words and meaning to. They are more important than learning the ABCs. Children learn only when they interact with the world. “If it hasn’t been in the hand and the body, it can’t be in the brain.”

For this kind of interaction children need a sensory-rich environment and the freedom to explore it with few restrictions or worries. The adult educators in a school should be seen as “consultants” rather than teachers. Consultants are resources who help to facilitate children’s growth and development by being aware of their individual needs and establishing an environment that meets those needs. “This is particularly important,” Ms. Bos said, “when there is a need for change.” In order to implement change, consultants can change themselves or the environment presented to the children. It is not acceptable to try to change the child.

An example of a child’s characteristic that adults might try to change is aggression. Ms. Bos emphasized the importance of aggressive behavior, but was quick to contrast it with violent behavior. “Violence,” she said, “is taught, and aggression is natural.” She said that children need to be aggressive, as when biting an apple, climbing a tree, or getting their needs meet. But aggressive behavior goes over the line, becoming violent, when there is an intention to cause harm to another.

Ms. Bos also stressed the importance of keeping in mind gender issues. Referring to The Wonder of Boys by Michael Gurian, she pointed out that boys and girls differ in the way they process information—boys tend to think in a linear fashion while girls tend to process various data simultaneously. Due to divergence in brain development, boys are in general better at abstraction skills and spatial capacities whereas girls are better at handling emotive data. Understanding such differences can aid one in establishing a rich learning environment for both girls and boys. Here are a few of her words of advice:

- Music is the first intelligence to emerge when a child is born. It is important to have music in the classroom and to have music activities which include all the children who are interested. It is equally crucial that other forms of art be present in the classroom.
- Books should be everywhere in the classroom environment.
- Water is the most important thing for a child to play with because it can not be contained, it is constantly changing, and it can be quite soothing.
- It is important to point out the specific details in a child’s artwork (saying “I see you used the red and blue to make purple”) instead of using generic praise (like “Oh, that’s a beautiful painting.”)
- Children have a basic need to discover. Discovery is to think you are the first one to experience something.
- It is important to maintain structure (through the set-up of the environment) but to give up control (by allowing children to explore freely).

We appreciate the presenters’ generously sharing their expertise and knowledge. The Bing staff gained much from all of the speakers.

References
January may seem early for eager parents to begin thinking about their children heading off to kindergarten, but many factors and choices influence their decision processes. Will their child be ready for this transition? What programs are offered? Which program is best for their child? In addition to this, parents must register in February for September enrollment.

This past January, we were pleased to welcome Dr. Rick Lloyd, pediatrician; Susan Charles, principal of Ohlone; and Sherry Elmer, a kindergarten teacher from an elementary school in Los Altos; who spoke to a group of Bing parents and eased anxieties concerning kindergarten readiness.

Dr. Rick Lloyd and Susan Charles have both spoken at Bing for the past few years. Their empathy and knowledge have continuously comforted parents and we were pleased that they were able to return.

Dr. Lloyd began by speaking about the differences between four-year-old and five-year-old children. He stressed that his information was strictly “generalizations,” yet quite often holds true. Some of his generalizations include the increase in attention span, fine motor control, and speech at age five. He also mentioned that the four-year-old is not necessarily concerned about performing acceptable behaviors, but the five-year-old “wants to please.”

Dr. Lloyd continued by going into various characteristics of a typical five-year-old, including the beginning of abstract thought, the involvement in the “here and now,” the tendency to be optimistic, the desire to be good, and the increase in relationships and importance of friendships. When discussing some aspects of play, Dr. Lloyd mentioned that five-year-olds tend to become more competitive, are usually best in one-on-one activities, and tend to group play by gender. Dr. Lloyd kept the numerous parents at ease with his sense of humor and stories of his own children. He explained that “it took forever” to get his children dressed in the morning, so he decided that he would put them to bed already wearing their school clothes. Dr. Lloyd realized this might seem absurd to some, but amazingly, it assisted his family’s morning routine.

To summarize, Dr. Lloyd emphasized two things that five-year-olds need: to be loved and to feel competent. Dr. Lloyd stressed the importance of making sure school-age children eat well and get a good night’s sleep.

Dr. Lloyd then went into some of the negative societal tendencies that are harmful to our children. These include the need for intellectual attainment at an early age; the miniaturization of adulthood or confronting children with adult problems; and separation between children and a nurturing home environment. Dr. Lloyd believes that this society has too many absent fathers and mothers due to many factors, including work habits. He concluded by stating that “five is an age of goodness and magic.”

Susan Charles presented and shared information on kindergarten readiness. Susan Charles is the principal of Ohlone Elementary School and has helped parents with data on the curriculum and teaching styles at the twelve elementary schools in Palo Alto. She began by talking about factors that may predict that a child is not ready for kindergarten. Some include extreme separation anxiety, short attention span, and extreme difficulty with transitions. She stressed that these are normal characteristics; parents should be concerned only if these attributes are present in extreme degrees or if a child has numerous factors that are of concern.
Susan Charles described the twelve schools in Palo Alto, including two “choice” schools, Ohlone and Hoover. These two particular schools are not neighborhood schools and each uses a specific educational approach. Ohlone is self-directed by the child: children are given many choices, teachers use quiet guidance, and teachers support individuality. Hoover uses a teacher-centered approach and follows a more traditional or “back to basics” approach. To enroll a child at either of these “choice” schools, parents must enter a lottery.

There are also two other distinctive programs offered through the Palo Alto School District. One significant curriculum approach is found at Escondido Elementary School. Escondido has a Spanish Immersion program in which eighty percent of children are non-Spanish speaking. The first year is taught mostly in Spanish and then a combination of Spanish and English the second and third year. Another offering is the Young Five’s program found at some of the Palo Alto schools. To be eligible for this, parents must also enter a lottery.

Parents inquired about the differences in the elementary schools in Palo Alto, but Ms. Charles explained that the only differences in the schools are the teaching styles and “not what they teach, but how they teach.” Additionally, she emphasized that elementary school is about community, so choosing your neighborhood school is best. She also stressed that many neighborhood schools combine the styles of Ohlone and Hoover, and the best school environment depends on the child and on what the parents want for the child.

Sherry Elmer is a kindergarten teacher who spoke on behalf of the Los Altos School District. She briefly discussed a voluntary kindergarten screening that the Los Altos School District offers, consisting of a 20-30 minute visit with the child during which he or she is asked questions and scored on readiness. This is reassuring for parents who are wondering whether their child is prepared to make the transition to kindergarten. Ms. Elmer also discussed a transitional program that involves a more extensive screening for those parents seeking more outside guidance.

After the exceptional and informative speeches from the speakers, the parents were able to ask any questions they might have. The panel eased the anxieties and assisted the parents with knowledge and facts regarding the transition into kindergarten. Bing Nursery School was once again very appreciative to the visitors and glad to have been able to offer such an informative and reassuring evening.
Bing Nursery School demonstrates its strength as a community through the annual Harvest Moon Auction. Designed as always to provide funds for the scholarship program, the event was a spectacular success this year. $170,000 was raised to make assistance available to families with children attending the school. Our deep appreciation goes to Helen and Peter Bing, Sun Microsystems and others who made generous gifts through the auction in support of the scholarship fund.

The decorative theme this year was inspired by the children’s book Possum’s Harvest Moon by author and illustrator Anne Hunter. Her willingness to share this special book as part of the festivities gave a special ambience to the Harvest Soiree.

This achievement can only happen with an incredible commitment of talent, time, creativity, and generosity of spirit. Our sincere appreciation goes to Ellen Mouchawar, auction chairperson, for her leadership characterized by enthusiasm, organization, and energy. Grateful recognition is sincerely extended to each of the committee chairpersons.

Thank you to all who came together as members of a community to accomplish something of meaning and significance in the lives of children.
Bing Children’s Fair 2000

Dear Bing Parents, staff, and students:

Thank you! To all of you for a wonderfully successful Bing Children’s Fair, we couldn’t have done it without all of you. The Bing community is truly an amazing group of people—even the heat didn’t stop the fun. Thank you to all who baked goodies for the bake sale/cake walk and made delectable dishes for the International Food booth. Also, thank you to the incredibly talented entertainment; the Rogue Band members who showed us the true meaning of community and to all who volunteered at our many activities.

The biggest thank you goes out to the students and children who attended the fair and the staff who went above and beyond the call of duty!

Thank you again!

Carmen F. Dowley
Chairman of the Bing Fair 2000

My Favorite Thing about the Bing Fair was...
compiled by Pam Crisostomo with Center AM children

“The food and fishing.”—Sara
“The pocket lady.”—Drew
“Just fishing.”—Lin-Lin
“The games.”—Sophie
“The fishing.”—Lucy
“My favorite game was the fishing game.”—Nicholas
“Fishing and I like painting cookies, too.”—Zachary
“The obstacle course. I rolled like a tree log, then I went through the tunnels.”—Erin
“Here’s one thing. I didn’t like the drums. Here’s what I liked most of all: I liked when I went fishing on the bridge.”—Colin
“The fishing. I got gold fish and now they’re in my lunch. My first favorite was the cookie-making and mama packed it in my lunch.”—Emma
It's once again time to start thinking about the Bing Nursery School's 12th Annual Harvest Moon Auction.

This Bing tradition brings our families together for one spectacular evening where we live a little, give a little, and make a big difference in some children's lives through the scholarship fund.

The Harvest Moon event gets bigger and bigger every year... and this year we need your help.

Please contact the auction co-chairs for more information about participating:

- dawn macurdy billman
  - 650-324-8815
  - dawnmacurdy@earthlink.net

- milen tobagi
  - 650-948-2059
  - milen@pacbell.net

The auction is to be held on Saturday, November 4th, 2000.