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**Nurturing the Remarkable Powers of
Children**

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Recently I saw a toddler chasing after a bird in a park. The boy followed the bird across a low hillside, while his mother kept pace on the path below. Whenever he got close enough to take a look, the bird flew a few yards away, and each time the boy resumed pursuit. He tripped and fell on the rough ground several times, but he always bounced right back up and went after the bird again. Smiling broadly, he was simply enthralled. All the while, the mother adjusted her pace to that of the child, remaining at a distance that must have given him a great sense of freedom.

The Boldest Explorers

This toddler's behavior is an example of what Margaret Mahler (Mahler, Pine, & Bergman, 1975) called the "practicing phase" of development. Toddlers are the boldest of explorers. They climb couches, chairs, and stairs, seeing what they can find. They energetically march along a sidewalk, elated by their ability to move upright. And they are impervious to knocks and falls. Along a walk, they will stop and examine the most common objects—a puddle of water, an insect, a leaf—for long stretches of time. Then they venture off again.

Prior to toddlerhood, babies are curious, too. But the exploration drive seems to peak during the second year (from about 12 to 18 months or so). During this period, toddlers can become so

consumed by the thrill of locomotion and exploration that they forget about the mother's presence altogether. After this, the child becomes a bit more wary. Children start worrying again about their mother's whereabouts, and injuries affect them more.

As adults, we sometimes boldly explore the world, too, as when we hike over new terrains or dive into unexplored waters. The difference is that the toddler's full-tilt explorations last day in and day out. The toddler's whole waking life is one wonderful adventure.

When the boy was chasing the bird, the mother exemplified an *unobtrusive presence*. She was, as Kierkegaard (1844/1946) advised parents, "present and yet not present." She was present in the sense of keeping watch on the boy for the sake of his safety, yet she kept at a sufficient distance to enable him to explore the world on his own.

One might think that this unobtrusive presence would come easily to adults, but it doesn't. Adults have trouble just being present and available. Instead, they constantly give directions and instructions. They say, "No, not so fast," "No, don't climb like this, watch me," "Let me show you how this toy works." They rob the child of a chance to learn on her own. Later, I will go into this topic in more depth. But first I will describe four other remarkable powers of childhood. Then I will discuss how we can best nurture them.

Drawing

Young children, from about 2 to 8 years of age, love to sing, dance, draw, compose poems, and engage in dramatic (make-believe) play. And as Howard Gardner (1980) has emphasized, their artistic development routinely goes through periods when it blossoms in breathtaking ways.

The most-researched artistic activity is drawing.

Toward the end of their second year, children begin to scribble. No one teaches them to scribble; they just begin doing so. Over their next several years, they pour out drawing after drawing. And while they draw, they often become so absorbed in the process that they are largely oblivious to what's going on around them.

Children begin drawing distinctly human figures at about age 4 years. They draw the head with a face, and then they attach legs to it. Researchers call these drawings *tadpole* figures (see Figure 1). The striking feature of the tadpole is that the legs come directly out of the head. There is no trunk. Sometimes children also draw arms, but they draw the arms sticking out of the head, too. There is still no trunk.

Most researchers assume that the tadpole reflects a deficiency on the child's part. For example Norman Freeman (1971) has tried to figure out what's lacking in the child's planning or memory. Some scholars, however, don't see tadpoles as deficient at all. These scholars include Gestalt theorists such as Rudolf Arnheim (1971), who taught at Sarah Lawrence for most of his career. Gestalt theorists, as the name implies, are interested in gestalts, or forms, and point to the aesthetically pleasing quality of the tadpole form. As the Gestalt researcher Henry Schaeffer-Simmern (1973) said, the child isn't interested in putting together memorized parts of the human figure. The child wants to create harmonious forms. Note that the tadpoles in Figure 1 have a balanced, pleasing quality. Another aesthetic value is simplicity; it's better to convey an image with fewer lines than many, when fewer will suffice. With a few simple lines, tadpoles capture the essence of an animated human being.

Next, between about 5 and 8 years of age, drawing goes through what Howard Gardner (1980, p. 99) has called the "Golden Period." Children routinely produce drawings that are fresh, lively, and beautifully organized. Figure 2, from Howard Gardner's book, *Artful Scribbles* (1980), is a 6-year-old's drawing of a girl jump-

ing rope. The child captures a lively harmony by balancing the curve of the rope with that of the legs. Gardner places the child's drawing next to a painting by the modern master Paul Klee, on the right. Gardner wants to illustrate the similarity of children's work with that of the masters, but the child's drawing is actually livelier than the Klee.

Indeed, Klee, Kandinsky, Picasso, and others said that they try to capture the artistic attitude they had as a child. Picasso said, "Once I drew like Raphael, but it has taken me a whole lifetime to learn to draw like children" (Gardner, 1980, p. 8).

Then, at about the age of 7 or 8 years, a shift takes place. The drawings become more geometrically precise (Gardner, 1980). Figure 3 shows two pictures by neighbor Andy. The first, which Andy drew at the age of 6 years, is lively and freely expressive. The character seems to move. The figure on the left, which Andy drew at the age of 9, is more geometric—rigidly so.

The shift to geometric precision may have more than one cause. Gardner (1980) points to the effect of schooling, which emphasizes precision. I am more inclined to think of it as the part of the general cognitive development Sheldon White (1965) called the "5 to 7 year shift." Thinking that was so free and imaginative becomes more rational, logical, and precise. In Piaget's terms, 7- or 8-year-olds move into concrete operations, where they use mathematical logic to bring order into the concrete, real world.

In any case, I want to emphasize that children—and as far as we know, all children—go through a Golden Period when drawing blossoms in a magnificent way.

Dramatic Play

One afternoon, our daughter Sally, who was 2 years old, pointed to something on the top of our vacuum cleaner and said, "Deed." I couldn't see anything she could be pointing at, but she just kept pointing and exclaiming, "Deed," becoming increasingly frustrated by my inability to respond to whatever she saw.

I was shaken. Was she hallucinating? I decided to push the episode out of my mind and get on with the tasks for the day.

The next afternoon, I took Sally to the park and pushed her on a small merry-go-round. When she got off, she said, "Want ride, Deed?"

Then she pushed the merry-go-round for her imaginary companion.

It was not long before Sally talked to both Deed and another imaginary companion, “Bissa.” No one in our family had the faintest idea where the names came from. Both Deed and Bissa were less than an inch tall. They sometimes rested in Sally’s pockets or in the armrest holders inside our car. They left Sally’s life sometimes before she was 8 years old.

After I got over my initial reaction, the possibility that my daughter was hallucinating, what struck me most was the sheer creative power. She seemed to create something out of nothing.

Children commonly react to imaginary companions as if they are real, and the companions have fascinating lifestyles. Many companions have lots of pets, including giraffes, bears, and lions, and the companions provide the children with great adventures. From Marjorie Taylor’s excellent book (1999), I get the impression that about one-half of children have imaginary companions. Sometimes children are pretty private about their companions’ goings-on; sometimes the family knows about them. They enter the child’s life at about 2 years and leave at about 7. Like the change in drawing, the abandonment of imaginary companions seems to reflect the general 5- to 7-year shift, when thinking loses its freely expressive and imaginative quality and becomes more rational, logical, and realistic.

One mother, Nancy Rivera Brooks, wrote a newspaper article about the emptiness her entire family felt when her son’s companion disappeared. The companion’s adventures had been like an exciting book, which had now come to an end. Ultimately, though, Brooks decided that the companion’s departure was for the best because, “You know you are in trouble when your kid’s imaginary creations have a more interesting life than you do” (cited in Taylor, 1999, p. 119).

Although imaginary companions are particularly striking, they are but examples of a general tendency among young children to engage in dramatic play. Children use dolls, sticks, rocks, and all kinds of objects to make up elaborate theatrical events. The video *When a Child Pretends*, by the Child Development Institute at Sarah

Lawrence (Drucker, Franklin, & Wilford, 1999), illustrates how rich the scenarios can be.

Sensitivity to Nature

Early on, children take a keen interest in the natural world. I mentioned at the beginning a toddler’s thrill at the sight of a bird, and toddlers generally react to birds, dogs, and other animals the same way. Their fascination with nature is also prominent at the beach, where they will spend hours sifting through the sand, feeling it, patting it—completely absorbed.

Young children’s interest in animals is so intense that animals pervade their dreams. Children between the ages of 3 and 7 years (and perhaps a couple years after that) dream about animals over one-third of the time (Foulkes, 1982, 1999; Van de Castle, 1983). Three- to 5-year-olds dream about animals more than about humans or any other topic. Adults dream about animals less than 8 percent of the time (Van de Castle, 1983).

Children’s affinity to nature seems to last until the age of about 12 years. Until this age, they eagerly explore natural settings, spontaneously developing powers of patient observation. In a pioneering study in rural Vermont, Roger Hart (1979) found that children spent long stretches of time simply watching wildlife. And their careful observations led to expert knowledge. For example, at the brooks, ponds, and river, they knew the habits and habitats of the water species in minute detail.

Similarly, Robin Moore (1986) found that in when children had access to parks and vacant lots in urban areas of England, the children patiently observed birds, flowers, insects, and small animals. When the children showed Moore insects and plants in vacant lots, he often felt as if he was on a tour with an expert nature guide¹.

It seems, then, that when children spend time in nature’s outdoors, they become little naturalists. This was evident in during a project Moore initiated in Berkeley, California, in 1972 (Moore, 1989). Moore and the community removed a half-acre of asphalt in an elementary school playground and created a nature area with ponds, vegetation, and dirt paths. The children reported that whereas the asphalt was “boring,”

1. Because natural settings foster patient observation, we might wonder if today’s high rates of attention disorders reflect lack of time in nature’s outdoors. Preliminary research supports this possibility (Crain, 2003, p. 59).

they loved to take little trips in the nature area and look at things. In fact, all their senses were awakened. They handled pebbles, tasted plants, felt breezes, smelled leaves, and listened to birds. As one boy said, "There's always something new to find out."

The children in the Berkeley nature area were encouraged to document their observations in their classrooms, and the children enjoyed doing so. But the child's fascination with nature transcends objective facts and statistics. Young children in particular find aspects of nature to be magical. (I am told that 5- and 6-year olds here at the Child Development Institute call a large rock in the yard the "magic rock".) Young children also like to discover cave-like shelters under trees and bushes, and inside the shelters they engage in high levels of make-believe play (Kirby, 1989).²

For older children, too, natural settings stimulate creative activities. Eight- to 11-year-olds enthusiastically build their own shelters under trees and bushes, using fallen branches, discarded lumber, old crates, and other "loose parts" in the process (Hart, 1979). They seem especially eager to build shelters in areas that are a bit wild. Perhaps, as David Sobel (1993) suggests, they feel like explorers and adventurers who want to build a home base in a new territory.

Children also put nature into their drawings and poems. Teachers and parents know that children frequently include the sun, birds, trees, and other aspects of nature in their drawings. Less known is the extent to which nature inspires their poetry. I examined four anthologies of poems by children between 2 and 8 years of age, and I estimate that 56 to 85 percent of the poems are about nature (Crain, 2003, p. 94).

Many of their poems reveal the keen observation I have emphasized. Eight-year-old Wendy Hancock (Rogers, 1979) makes a special point of listening carefully:

The storm is over and gone away,
Not a bird sings, not a twig moves.
There's driftwood on the beach...

But there *was* a sound,
Was it a rabbit scurrying
Or a dog barking?

No, no, no,
It was the whisper of the trees
Far away,
Far away

In addition, many children's poems have a freshness and immediacy because the children speak directly to animals and plants. Here's a poem by 2-year-old Thomas Broadbent (Rogers, 1979) that asks a spider an important question.

Bu'fly, bu'fly
Fell in a pond
Why spider, why spider, why?

With disarming simplicity, Thomas reminds us of what it is like to be on intimate terms with the natural world.

As children explore and play in nature's outdoors, they develop feelings that I wouldn't have guessed. Most notably, they acquire a sense of being at peace and at one with the world. In rural Vermont, Hart (1979) believed this feeling usually developed at ponds. At water's edge, the child often stared into the water in a daydream-like state, aimlessly dabbling the mud or water. In these moments of quiet, the children seemed to feel a fluid connection between themselves and the water—a sense of oneness with their surroundings.

Hart cannot be sure, of course, what the children were actually experiencing, but somewhat similar feelings emerged during Robin Moore's (1989) project in the Berkeley schoolyard. When the schoolyard was entirely asphalt, there was constant fighting and bickering. But in the new nature area, the children were calm. They said the nature area "makes me feel at home," "Being alone doesn't bother me now," and "It feels like one big family there." The nature area seemed to take them in like a soothing mother and give them a sense of belonging.

Feelings of calm and connection are also prominent in Louise Chawla's (1990) study of 20th century adult autobiographies. The authors who remembered intense experiences with nature as children highlighted feelings of calm and rootedness in the world—feelings that lasted a lifetime. An especially eloquent description of such feelings is found in the autobiography of

2. A study by Taylor, Wiley, Kuo, and Sullivan (1998) tentatively suggests that green settings in the inner-city stimulate increased levels of various kinds of creative play.

Howard Thurman, an influential African American minister.

Thurman, who grew up in Daytona, Florida in the early 1900s, felt lonely as a boy. When he was 7 years old, his father died, and his mother was distant. He felt comforted by the night and by an old oak tree. He also felt befriended by the woods. But his most intense experiences came at the seashore. When he walked along the shore one night, and the sea was very still,

I had the sense that all things, the sand, the sea, the stars, the night, and I were one lun through which all life breathed. Not only was I aware of a vast rhythm enveloping all, but I was part of it and it was part of me.

Even the storms seemed to embrace the young Thurman, and his experiences of unity with nature as a boy gave him a

a certain overriding immunity against much of the pain with which I would have to deal in the years ahead when the ocean was only a memory. The sense held: I felt rooted in life, in nature, in existence.

Children seem to have a special sensitivity to nature prior to adolescence. Then their attention shifts to their place in the social world and their peer groups (Hart, 1979; Sobel, 1993).

Language

A fourth special power of childhood is language acquisition. More is known about this capacity than the others, so let me briefly say that Chomsky and his followers have made it clear that the child's acquisition of language is an amazing feat. When it comes to vocabulary, children from about 1 to 6 years of age pick up an average of 5 to 10 new words a day. But vocabulary growth is just the beginning. What is truly remarkable is the rapid development of syntax—the grammatical rules for forming sentences. These rules are so complex, abstract, and deeply buried within spoken language that linguists are still trying to make them explicit. But children master a working knowledge of most of them by the age of 6 or 7, and then the rest by puberty. And this is not all. If a child finds herself in a new land, where another language is spoken, the child masters the second language too. It's a common observation, Chomsky says, that a young child of immigrant parents picks up a sec-

ond language in the streets from other children, with amazing rapidity, and soon speaks this new language fluently. In the meantime, the child's immigrant parents struggle away, finding the process far more tedious and difficult (Crain, 2003, Ch. 6).

It is as if a child at 6 years could perform problems in higher mathematics. The child is not, to be sure, conscious of the syntactic rules she masters, but she has a working or intuitive grasp of them. Every normal child is a linguistic genius.

Nurturing These Strengths

I have reviewed five of the special strengths of the childhood years: (1) the bold and elated explorations of the toddler, (2) the flowering of drawing in early childhood, (3) the creativity of make-believe play in early childhood, (4) the sensitivity to nature throughout childhood, and (5) language acquisition.

How can we nurture these qualities?

First, we don't have to do a lot of motivating or direct teaching. No one has to teach a toddler to vigorously march about and explore everything in sight. No one has to teach a young child to draw scribbles or tadpoles or the lively figures in the Golden Period. The behaviors emerge spontaneously, from the child. They are part of her natural development.

With respect to all these capacities, then, there is particularly good reason to adopt a *child-centered* approach (as formulated by Rousseau, Dewey, Montessori, and others). This approach assumes children are naturally motivated to develop different capacities at different stages, and they have a kind of inner wisdom with respect to the experiences they need. When they find activities that enable them to develop their powers, they take a keen interest in the activities and throw themselves into them. So, instead of setting our own goals for children, we take our cues from the child; we watch for children's keen interest and enthusiasm. Then we give them opportunities to work on the activities that generate these feelings.

At some point, for example, a baby shows great enthusiasm for walking and climbing stairs, and a bit later, for drawing. So we take heed of this enthusiasm, and we give her opportunities to pursue these activities.

Most child-centered writers also place a premium on *independent* learning. They want to give children the chance to learn on their own. When, for example, a child taking her first steps stumbles, we restrain our impulse to help. We give her a chance to master walking by herself.

But most adults have great difficulty accepting the child-centered philosophy. I've found that adults generally assume that children won't learn anything unless they, the adults, teach it.

When, for example, toddlers start to vigorously march along, exhilarated by their new power, adults intervene. They take the child's hand and steer her in the "right" direction. If toddlers try crawling down steps backwards, the adults show them how to walk down the steps "correctly."

Similarly, adults commonly try to teach children how to draw. Children's spontaneous drawing inspired Picasso, Klee, and Kandinsky, so one might think adults would just step back and admire the child's work. But most adults try to improve it. For my recent book (1999), I collected scribbles and drawings, and I found teachers telling 2- and 3- year olds to draw rounder circles and to draw within pre-shaped outlines. The adults also tried to correct the children's tadpoles, telling the children to include a trunk. Even sophisticated art educators, who know the spontaneous developmental sequences, recommend strategies for helping young children improve their drawing, including their drawing during the Golden Period (Smith, 1998; Wilson & Wilson, 1982).

With respect to make-believe play, too, many adults believe adult direction is essential. Several psychologists who adopt a Vygotskian viewpoint (Berk & Winsler, 1995) contend that adults and older peers must get make-believe play started. I find the research evidence for this very weak (Crain, 2003, p. 41), but it's a popular position in the developmental literature.

It's hard for most people to see how much our direct teaching undermines the child's independence and confidence. It tells the child, "Don't trust your natural impulses and your own experience, but look to more powerful people for guidance."

A child-centered approach therefore avoids direct teaching. Instead, it tries to give children opportunities to learn on their own.

To many adults, this approach sounds too hands-off. It sounds just too easy and even negli-

gent—as if all we have to do is leave the child alone. But this is hardly the case.

Toddlers

Consider the toddler walking outdoors, elated by her ability to walk, and stopping to explore objects of interest—a stick, insect, or a puddle of water. I have said that we best create opportunities to explore by maintaining an unobtrusive presence. Our presence is necessary for the child's safety; we cannot just let a toddler wander about outdoors. But our presence is most helpful when it is unobtrusive. We walk along at the child's pace, stopping when the child stops to examine objects, all the while staying sufficiently in the background to give the child a chance to make her own discoveries.

But maintaining an unobtrusive presence isn't easy at all. It requires considerable patience. And most adults have trouble just being present for a child, deriving pleasure from the child's enthusiastic activity. It's easier to be active—to step in and direct the child or give a verbal lesson.

I recently saw a girl about 2 years old, walking with her mother, when the girl stopped in fascination at two puppies. After a while the child said, "Two dogs," and she kept staring, totally absorbed. The mother, however, saw a teachable moment and coaxed her daughter into a "Two's song"—"Two dogs, two cows, two horses..." The child reluctantly joined in, and the mother pulled her along. The mother might have strengthened her child's vocabulary, but we will never know what was cut short in the child's experience of silent wonder.

If a lesson doesn't immediately present itself, as when a toddler starts to pat a puddle of water, adults just move their children along. In Manhattan, adults rarely stop to let children examine anything at all. Instead, they push toddlers in strollers. In fact, they routinely push 4-, 5- and 6-year-olds in strollers as well. The children in the strollers look dazed.

Why this heavy use of strollers? Is it because the adults are in a constant hurry and put their own time-schedules ahead of their children? I don't think this is the whole story. They do care about their children, but not particularly about their children's enthusiastic walking and sensory explorations. Rather, they have a bigger agenda, and the top item in the agenda is their children's

academic success. So when parents push children along in the strollers, we often observe the parents focusing on the children's verbal skills, especially their vocabulary. Parents often quiz their children with questions such as, "Today is Friday, what day comes after Friday...?" The child in this case gave only perfunctory answers.

If the children could express themselves, I'm sure they would say, "Here I am, eager to explore this wonderful world on my own. But adults force me into the stroller, and don't even let me walk. All the time, they talk, talk, talk. They talk about things I can't even see. There's a fascinating world to investigate. Why do they rob me of these opportunities?"

The sophisticated upper middle class adult knows—at least on a general level—the importance of vocabulary. Vocabulary is the largest factor in most I.Q. tests (Sattler, 2001). Verbal skills will eventually get the child into the best colleges, the grand prize at the end of the road. Who cares about the child's ability to march along the sidewalk or grass? All children can do this. Who cares about the child's wordless wonder at a bird, dogs, or a puddle of water? Verbal skills—that's what the tests measure.

So the period of intense, independent exploration is pushed aside. And a precious developmental strength is lost.

Play and the Arts

Let me turn to play and the arts. In theory, it sounds easy to give children opportunities for these activities. Just give them some dolls or crayons and free time. But any teacher or parent that tries to create opportunities for the arts or play runs up against the enormously powerful standards movement in contemporary education. The standards movement, like parents' achievement agendas, emphasizes early academic preparation and standardized test scores.

Schools are too busy preparing children for tests to give them time for play and leisure. Some school districts—for example, in Chicago, Atlanta, and parts of Florida and Texas—have eliminated recess. Even kindergartens have become so academic that they don't provide much time or materials for play and the arts anymore, and this is becoming true of preschool, too. Of course parents might try to give children time for play and the arts after school, but children are given so much homework that there is

little time for these activities. They get so tired that they just want to watch TV and sleep. Reversing these trends won't be easy. But if we want to give children opportunities for play and the arts, we must make the efforts to convince administrators, legislators, and parents that we need to make time for them.

Some parents, to be sure, sign up their children for art instruction after school—as well as tennis lessons, ballet lessons, piano lessons, Little League, and so on. They do so in the hope of creating the well-rounded applicants that prestigious colleges say they look for. But these lessons are largely adult-directed. They don't give children the opportunities for the spontaneous play and artwork that can be so creative.

For those who are committed to nurturing spontaneous pretend play, I've written specific recommendations in my book, *Reclaiming Childhood* (2003). These recommendations overlap a good deal with those of the Child Development Institute video (Drucker, Franklin, and Wilford, 1999).

We help foster pretend play by providing settings and props, such as dolls, pieces of miniature furniture, and blocks. I think the best props are simple; they leave the most room for children's imaginations. Most commercial toys are overly structured—they do too much for the child.

After providing the props, it's important to let the child direct the play. We can play along if the child asks, but we need to allow the child to be in charge. For example, young children might set up a shop, playing the roles of shopkeepers, and want us to be a customer. When adults become too intrusive, children no longer enjoy make-believe play, and they curtail it. Ideally, the adult acts like a good-natured stage manager. The adult provides some props, and fills in a role when needed, but lets the child direct.

Similarly, I have recommended ways of promoting drawing by providing materials and keeping our interventions brief (Crain, 2003). With respect to both play and the arts, our single most positive contribution is our attitude. If we can just look at children's creative efforts in a fresh way, we will witness small miracles. And we should just let ourselves quietly enjoy what we see. We don't need to praise children; in fact, explicit evaluations exert undesirable pressures on them. Rather, we help through our quiet appreciation. Children sense this appreciation,

and it gives them an inner confidence that enables them to move forward boldly in life.

Nature

Exploring nature's outdoors, children develop their senses and powers of patient observation. Natural settings also stimulate their creativity and give them a sense of being part of the world. But today's children spend most of their time indoors. Longer school days and school years mean even more time indoors. And apart from school, when children are in the care of their families and babysitters, they also spend practically all their time indoors. They watch TV, play video games, and surf the Internet. A recent survey estimates that, outside of school, 3- to 12-year-olds' outdoor time averages *35 minutes a week* (Hofferth and Sandburg, 2001).

A major reason is safety. Many adults feel it's simply too dangerous to allow children to explore parks and natural settings by themselves. So it would help enormously if trusted adults could be present when children play in parks or by a brook.

Here the attitude of an unobtrusive presence is particularly useful. Adults need to keep a watchful eye on children for the sake of their safety. But it's best if they stay in the background, so children have the chance to be explorers and adventurers.

Roger Hart tells me that the British have developed "play workers" who serve this function. The play workers might introduce an activity to the children, such as building a shelter, but they leave much of the initiative to the children. They spend a lot of time just being a watchful presence. We need to provide much more of this service in U.S. parks and playgrounds, too.

If there are nature centers nearby, these can be good resources. Nature educators seem to naturally adopt this attitude I am emphasizing—that in which the instructor turns over the initiative to the child. A nature educator often asks questions that put the children's minds in motion, but he leaves the problem-solving to the child. For example, I heard one nature educator ask, "How many things in this field can you hear with your eyes closed?", and then he let the children come up with their own answers. Nature books for children often contain these kinds of questions, too (Crain, 2003, p. 67).

You can see my theme here. Adults help the most not by teaching in the sense of giving answers, but by creating conditions for the child's initiative and independent discovery.

But most important of all, we must protect natural settings. Everywhere we look, bulldozers are destroying trees, ponds, and weedy lots. The land is cleared for malls, housing projects, and office buildings. It won't do much good to advocate independent exploration of nature if there is no nature left to explore.

So we must defend nature in our local communities. This isn't easy. Powerful real estate developers stand to make huge sums of money by clearing natural settings. But it's vital that we protect nature the best we can.

In the course of our efforts, it's good to heed Robin Moore's (1986) thoughts on the importance of what he calls "rough ground"—weedy waysides, vacant lots, dirt roads, unpruned trees, overgrown fields, tall grass. Adults prefer neatly manicured lawns and flowerbeds, but wilder areas stimulate greater exploration.

Similarly, Hart (1979) and Moore (1986) talk about the value of "loose parts"—fallen branches, discarded crates and cushions, and other abandoned objects that children use for building shelters. An environment with loose parts may be a bit unkempt, but it fosters creative building.

Today, so much land has been paved over that it would be great if we could replicate Moore's (1989) project in Berkeley, taking up asphalt to create nature areas. It's important to note that Moore and the Berkeley community permitted some vegetation to grow freely, and an unexpected variety of animals visited or took up home in the new setting (Moore & Wong, 1997, Ch. 5). The nature area had a degree of wildness that excited the children's curiosity and gave them feelings of being part of nature as it really is.

Whatever we can do to protect or restore nature can benefit children—and other species as well.

Language

I will say little about language, since children develop it so amazingly without our help. Most impressively, they somehow acquire the complex syntax—the rules for creating sentences—by just hearing their language spoken.

It's a shame that many adults don't recognize this incredible achievement by the ordinary child. Instead, adults focus on what they can teach. Today, the focus is on raising children's vocabulary, especially in the poor neighborhoods. These efforts might be worthwhile, but we must be careful to avoid concentrating on any "deficits" to the extent that we make any child feel inferior. Vocabulary is trivial in comparison to every child's mastery of syntax. And all children somehow master it, whether they grow up in wealthy or poor neighborhoods. In fact, it is often the inner-city child of poor immigrant parents that not only masters the syntax of one language, but two or three. Upon meeting *every* 5-year-old, a teacher should think to herself, "This child has done something phenomenal. She has mastered incredibly abstract and complicated grammatical rules. Her mind deserves my greatest respect." This attitude could achieve wonders.

Making the Case

Although all normal children develop language, the other strengths I have described are endangered today. Children generally lack sufficient opportunities for the arts, make-believe play, nature exploration, and so on.

But is this situation a real concern? If schools and parents want to emphasize early academic achievement, does it really matter that children don't spend hours sitting beside a pond, building shelters, drawing, or engaging in pretend play? What's wrong with giving children an early start toward the best colleges? Others are doing it, and if we don't, our children might fall behind.

The Child Development Institute's video (Drucker, Franklin, & Wilford, 1999) observes that make-believe play actually introduces symbolic processes and hypothetical thinking that become valuable in school. This is an important

insight. Even so, many people prefer to teach the academic skills directly and right from the start.

I have felt, intuitively, that play, the arts, and nature exploration are so important that I've tried other ways of encouraging people to make time for them. In this paper, I've tried a kind of advertising pitch, highlighting the ordinary child's astonishing accomplishments. I thought to myself, "If I can show people the stunning beauty of young children's drawing, for instance, maybe people will make time for it."

But adults are so obsessed with giving children an early start toward academic success that I don't know if my tactic will be any more persuasive.

In the last analysis, I stand by a developmental philosophy—a philosophy that holds that every period is important in its own right. It's not just the child's future (and whether she gets into Princeton) that counts. Childhood itself is just as important, and children have a right to develop their full potentials as children.

As I've noted, when children encounter tasks that enable them to develop their emerging capacities, they display very positive emotions. They take a keen interest in the activities and become engrossed in them. Montessori (1949/1967) added that when they finish, they are joyful and serene. They look upon the world as full of fresh possibilities and are friendly to everyone. Montessori said the children are happy and at-peace because they have been able to develop something vital within themselves.

Aren't these emotions—curiosity, deep concentration, happiness, and serenity—feelings we all would like to possess? Shouldn't children be able to possess them in their own lives, as children?

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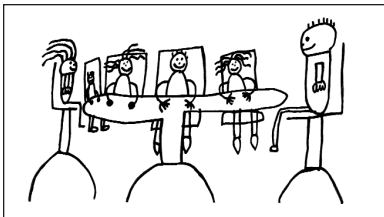
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A social activist, Dr. Crain has received several awards for his efforts on behalf of access to higher education. He is also editor of the journal *Encounter: Education for Meaning and Social Justice*.

The Child Development Institute was established in 1987 to enhance existing programs in child development at Sarah Lawrence College and to serve as a base for new activities.

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