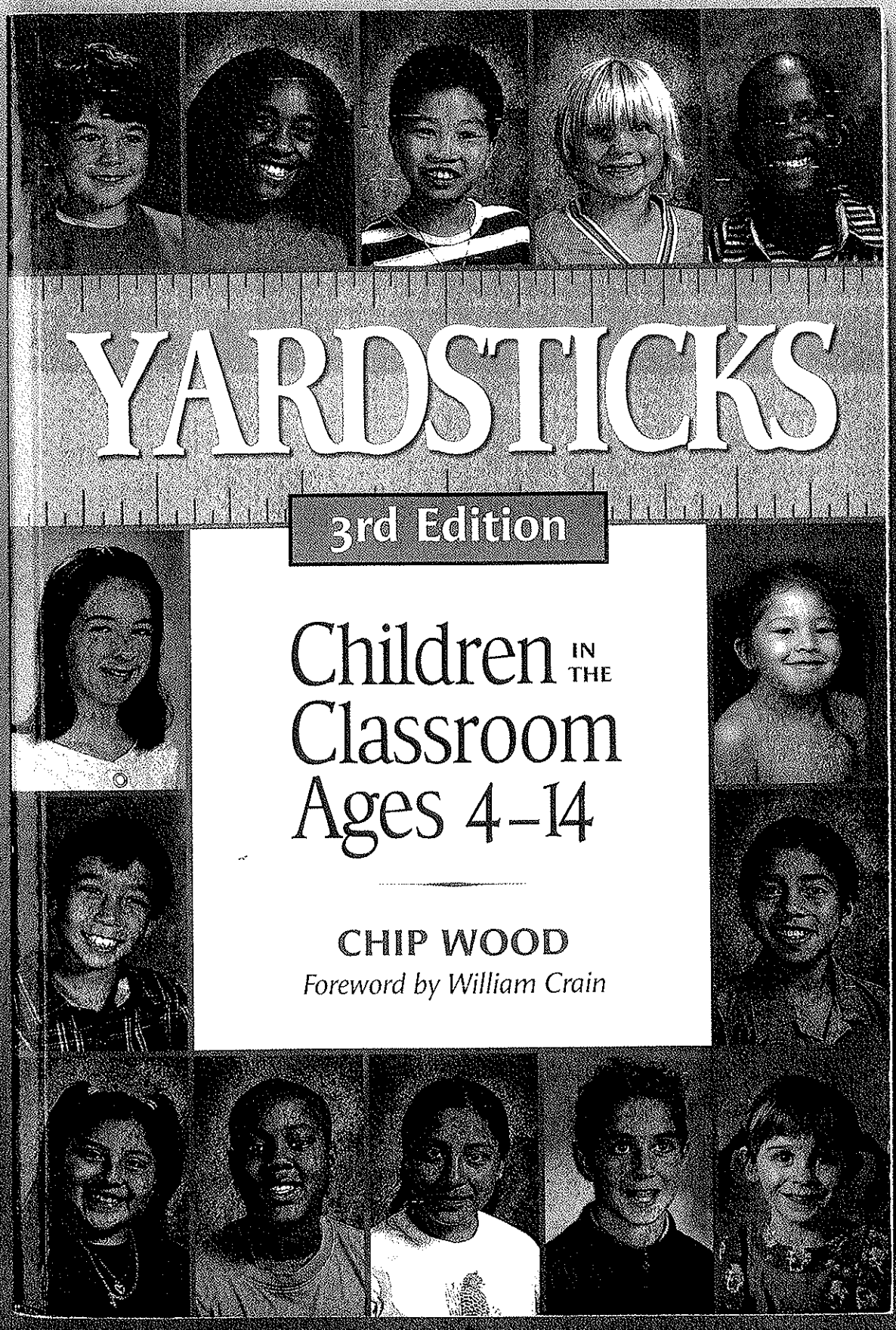


YARDSTICKS

3rd Edition

Children IN THE Classroom Ages 4–14

CHIP WOOD

Foreword by William Crain

Learning More about Child Development

The information about children's age-by-age developmental characteristics in this book is based largely on classical Western child development research done beginning in the early 1900s. Jean Piaget, Arnold Gesell, Maria Montessori, Lev Vygotsky, Erik Erikson, Rudolph Steiner, Caroline Pratt, Lucy Sprague Mitchell, Dorothy Cohen, Louise Bates Ames, and others have contributed to form a rich body of knowledge about how children grow and learn. The works of many of these child development experts are listed in the "References" section, as well as in Appendix B ("Resources for Educators"). Most of these seminal works, however, share a common limitation, being largely focused on the European American world of middle class children. Also, at between fifty and 100 years old, the works are dated. Nonetheless, without this research, it is hard to imagine where the field of child development would be today.

The reference list also provides more up-to-date resources, particularly those I have found useful in writing about the cultural context of development in American classrooms today. Barbara Rogoff's book *Apprenticeship in Learning* (Rogoff 1990) was important to earlier editions of this book, and her later book, *The Cultural Nature of Human Development* (Rogoff 2003), is significant for this revised edition. In her new work, Rogoff writes, "human development is a process of people's changing participation in sociocultural activities of their communities." (Rogoff 2003, 52) As I have seen clearly in American classrooms over and over, the social, emotional, and cultural development of which Rogoff speaks is as critical to learning as language, cognitive, and physical development.

Foreword

Education reform has become a top priority in the United States. Our political and corporate leaders constantly press for higher academic standards and more rigorous standardized tests to ensure that students will be prepared for the new global economy. To advance this agenda, policy makers have created a host of other initiatives, including efforts to align public education with specific workforce needs and penalties for schools that fail to raise test scores.

But, as educator Jeffrey Kane has observed,* these plans and policies typically leave something out: the child. The child is more than a test score or a future worker. Every child is a full, living individual with his or her own needs, interests, fears, and desires. And although educators must concern themselves with the child's future success, the child is very much a person in the present moment.

It might seem that a focus on the child's present life is a luxury today, when there is so much talk about preparing students for the competitive, high-tech world they will enter when they are grown. But a focus on the present is at the heart of the developmental perspective in education. In this view, children are inwardly motivated to develop different capacities at different stages, and we must give them opportunities to perfect their naturally emerging capacities at their present stage. If, instead, we simply focus on the skills they will need later on, we may curtail their full development.

*Kane, Jeffrey. 1995. "Educational Reform and the Dangers of Triumphant Rhetoric." In *Educational Freedom for a Democratic Society*. Ron Miller, Ed. Brandon, Vermont: Resource Center for Redesigning Education.

For example, young children have an especially strong urge to develop the artistic and imaginative sides of their personalities. And given a chance, they develop their creative capacities in breathtaking ways. But today's educational policy makers, with their eyes on the future economy, are replacing artistic and imaginative activities with academic skills at very early ages. As a result, children miss out on the chance to develop their full potentials.

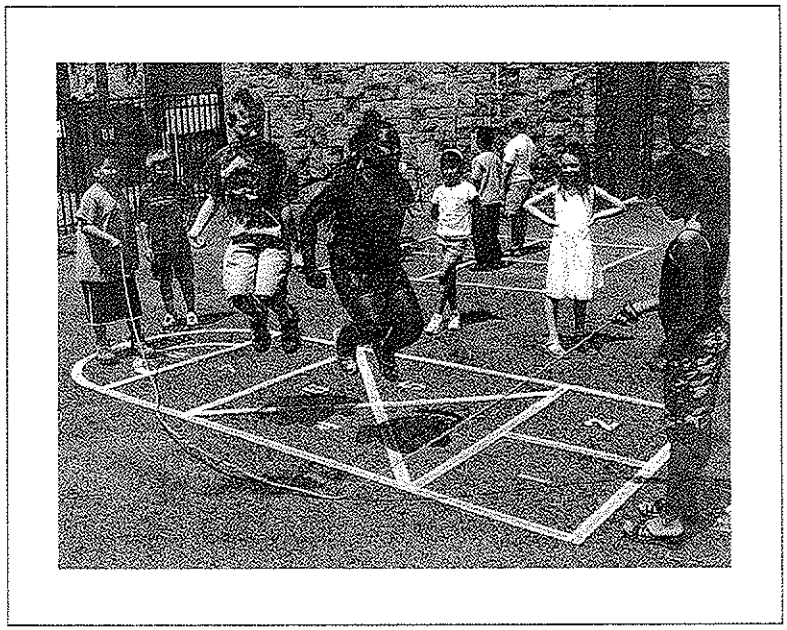
Educators who respect the child's own developmental schedule will find Chip Wood's book, *Yardsticks,* immensely rewarding. For each age, from four to fourteen years, Wood gives us a rich account of the child's naturally emerging capacities and distinctive ways of learning. Wood recognizes that not all children at each chronological age are exactly the same, but he provides useful guideposts that will help teachers select developmentally appropriate tasks and activities. For example, Wood cautions against burdening four-year-olds with paper-and-pencil tasks and reminds us of their need for physical activity. He also points out that seven-year-olds are eager to learn how mechanical things work, ten-year-olds delight in facts and memorization, and young teenagers often work best in social groups. For each age, Wood provides a treasure trove of useful observations and insights.

Wood incorporates ideas from Jean Piaget and Erik Erikson, but his primary inspiration is the work of Arnold Gesell. Like Gesell, Wood wants us to appreciate the uneven nature of normal development—how children normally go through periods of disequilibrium as well as periods of harmonious functioning. This knowledge helps us become more patient and understanding with children. More broadly, Wood shares Gesell's ability to write simply and express simple but powerful truths. For example, Wood reminds us that "the whole child goes to school; therefore, decisions about physical activity, food policies, and the development of social and emotional skills are as important as curriculum choices and test results."

Wood is also very aware of recent insights into the cultural lives of children. I believe readers will find much to interest them in his discussions of the strengths of African American and Latino/Hispanic children and their families.

Throughout the book, Wood demonstrates a love of childhood and a gentle sense of humor. He entertains us with many anecdotes. My favorite is about a five-year-old boy who marches up to his kindergarten teacher's desk, places his hands on his hips, and announces, "You don't seem to understand, teacher; I just came here to eat and play!" The boy's proclamation speaks of both his pluck and his naiveté. He has no idea of the force of the standards movement that is about to crash down upon him. But his spirited defense of his interests is admirable, as is Wood's defense of the interests of all children.

William Crain
Professor of Psychology
The City College of New York



Developmental Considerations

Four Principles of Child Development

All children everywhere in the world share common patterns of growth. Those patterns may vary somewhat in expression, depending upon the country and culture in which the children live. But physically, socially, emotionally, in their ability to think, and in their ability to understand and use language, children move in similar ways through the ages of childhood and the stages of development.

In the first half of the last century, the so-called "giants" in the field of child development—people such as Jean Piaget, Arnold Gesell, Maria Montessori, Erik Erikson, and Lev Vygotsky—observed, researched, and recorded most of the developmental patterns that form the basis of our knowledge of how children mature. Each of these experts looked at the whole spectrum of children's development in the journey toward adulthood, though today each is often noted for work in one key area. Gesell, for instance, is noted for his work on physical milestones; Piaget, for cognition; and Erikson, for social and emotional growth.

Over the years, the patterns in physical, social, emotional, cognitive, and language growth that these experts identified have been challenged and debated but finally largely accepted. That acceptance derives from educational researchers, who have confirmed the findings, and also from parents and teachers, who have corroborated the experts' ideas through their own experience of teaching and parenting children at different ages.

At the beginning of the twenty-first century, four key principles about child growth and development have stood the test of time:

1. Children's physical maturation, language acquisition, social and emotional behavior, cognition, and ways of approaching the world follow reasonably predictable patterns. These patterns have been broken down into stages in different ways according to particular theories.

2. Children generally go through predictable stages in the same order, but they will not all go through them at the same rate. Although children's developmental patterns do seem broadly similar the world over, important details in their development are deeply influenced by culture, personality, and environment. No two children are the same, no two families, no two communities, no two schools.

   If, for example, we compare two ten-year-olds, even within a single culture, we may find that one child is more like a typical nine-year-old in some developmental aspects, and another is more like a typical eleven-year-old in those same aspects. This three-year developmental span (from nine to eleven) is entirely normal, as long as each child's growth is relatively even and not dramatically delayed or erratic. Thus a child's chronological age may not be the same as his or her developmental age: If a child is chronologically ten but behaves more like most nine-year-olds, and this behavior lasts more than three months or so after turning ten, this child is most likely still developmentally nine, and parents and teachers should take that fact into consideration.

3. The various aspects of development do not proceed at the same rate. This is perfectly normal. A youngster who matures quickly in cognitive areas may mature slowly in physical and social ones. A child who advances slowly in cognitive areas may demonstrate above average physical and social abilities. Ability in music, mechanical tasks, or the arts may develop more quickly or slowly than language acquisition or the ability to perform academic tasks in school.

4. Growth is uneven. Like the seasons, the tides, the turning of the earth on its axis and around the sun, the birth and death of stars, the music of the universe—there is an ebb and flow to life that is mystical and spiritual as well as natural. Babies are calm at one time of day, fretful at another. Children are more easygoing at one age, more resistant at others. Learning seems to come in spurts followed by periods of consolidation. Obvious periods of sudden physical growth are often followed by periods of little notable physical change. This shifting back and forth is a normal part of the life cycle and appears to continue into adulthood. Changes are quite marked during infancy, in both rate and degree; become less dramatic during much of adulthood; and are again marked during the elder years.

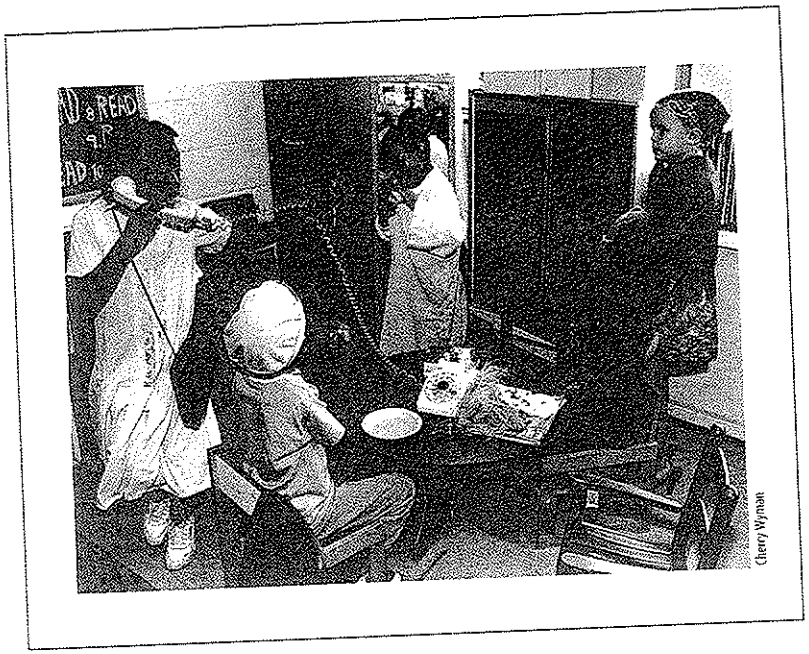
Developmental Needs in American Classrooms

The four developmental concepts just discussed should guide decisions we make in our country about schooling. We need to attend to all areas of growth because each plays a crucial role in learning outcomes and in providing balance in a child's life. The whole child goes to school; therefore, decisions about physical activity,

food policies, and the development of social and emotional skills are as important as curriculum choices and test results. A majority of American schools, however, increasingly shortchange children's overall developmental needs in favor of lopsided attention to cognitive development as expressed through standards-based academic assessment.

As an example of this lopsidedness, elementary school schedules in the United States are now largely governed by directives requiring ninety minutes of time-on-task instruction each day in each core academic content area, regardless of the age or grade of the students. Since the late 1990s, the educational trend has also been to give teachers less leeway in deciding on the structure and content of the school day. More schools have returned to the single-grade classrooms common in earlier decades, and increasingly more time is spent throughout the school year on paper-and-pencil assessments, detracting from actual teacher instruction time. Time is increasingly limited for physical, social, emotional, and cultural development, as evidenced by reductions in recess, physical education, art, music, theatre, and even integrated, theme-based academic units. For teachers and students, the world of instruction has returned to a more narrow and prescribed textbook-dependent, workbook-focused orientation typical of other "academics only" cycles during the past fifty years.

In the ten years since the last edition of this book, much has changed in the world of education, and in the amount of exposure children have to the world through the constant barrage of electronic media. But children's development has not changed. Children still follow the same patterns of development they have for generations. The pages ahead offer information about child development that can help teachers and parents advocate for the timeless developmental needs and rights of children as they go to school.



Five-Year-Olds

"Ramona loved Miss Binney so much she did not want to disappoint her. Not ever. Miss Binney was the nicest teacher in the whole world."

Ramona the Pest | *by Beverly Cleary*

After a busy morning in an overly academic kindergarten, a five-year-old boy marched up to his teacher's desk, put his hands on his hips, and announced, "You don't seem to understand, teacher; I just came here to eat and play!" Nothing could better characterize the developmental needs of the five-year-old than this story from my colleague, Sue Sweitzer.

Today, many of our kindergarten and first grade programs are once more seriously out of balance with the developmental needs of five-year-olds. Too much attention to paper and pencil tasks, test taking, and early reading acquisition is creating a pressure cooker environment for children, teachers, and parents.

Learning is at its best for five-year-olds when it is both structured and exploratory: structured through a clear and predictable schedule; exploratory through carefully constructed interest areas where children can initiate their own activity. The best teachers observe children's learning activities and then create teacher-directed instruction to complement the children's interests and meet the learning expectations for the age.

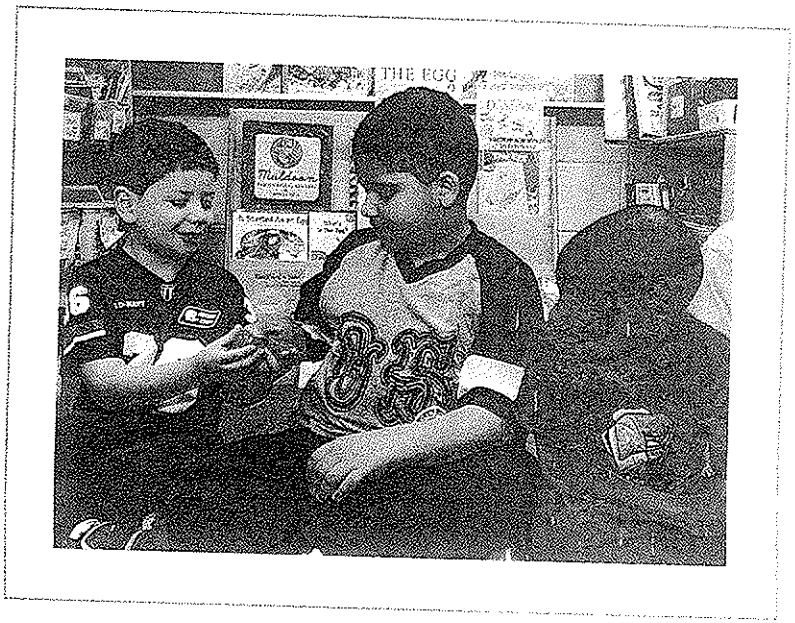
Five, overall, is a time of great happiness. Life is "good," says the five-year-old. A primary objective in life seems to be pleasing significant adults. Fives are constantly asking, "Mom, can I set the table? Can I put away the socks?" At school, five-year-olds also ask permission: "Teacher, can I use these markers? Teacher, is this how you do it? How much can I use, teacher?"

Five-year-olds need permission from adults to make transitions, to move from task to task. Fives are literal and usually accept adult rules as absolute and unbendable. In *Ramona the Pest* (Cleary 1968), Ramona wouldn't budge from her seat the first day in kindergarten because her teacher, Miss Binney, had told her to "sit here for the present." Certain that she needed to do exactly as her teacher said—and misunderstanding Miss Binney's use of the word "present"—Ramona was sure if she stayed in her seat, Miss Binney would give her some sort of wonderful gift.

Although many children have by now been in social settings with peers outside the home for several years, kindergarten remains a time of immense social interest. Children love to explore the world of "real school" together. Fantasy play, dress-up, housekeeping, and play with puppets continue to be essential for growth and development. Sadly, many of these essential learning activities have been dropped from kindergarten programs.

Five-year-olds are not selfish, but they are at the center of their own universe and often find it hard to see the world from any other point of view. Children may find it impossible to complete a given task except in the one way they know—their way. They often have trouble expressing empathy if a conflict affects them directly—sharing their toys or space, for example—but if a classmate across the room is crying, a crowd of caring fives may gather.

Young five-year-olds seem in a period of consolidation, resting from the exuberant, somewhat wild behavior of four. At four children exaggerate, tell long stories, talk constantly, and are always in motion. At five, they are a little calmer, more literal and exact.



One-word answers—"good" and "fine"—replace elaborate explanations. Parents who try to get answers to the question, "What did you do in school today?" may find fives frustrating.

At five, children's vision most easily focuses on objects near to them. They become engrossed in the details of a block construction or a complicated painting. Because they cannot easily sweep their eyes laterally across a printed page, left-to-right and right-to-left, most five-year-olds are not ready for formal reading instruction.

It is especially important to remember that five-year-olds do not think the same way about the world as adults do. Cause and effect are not explained through logic, but rather through intuition. Five-year-old thought that appears illogical—for example, "I go to sleep because it's night"—can be considered pre-logical. Bound by the senses, restricted to what they can see, fives must act on one thing at a time. The best kindergarten teachers know that they, too, must focus on one thing at a time, keeping expectations clear and simple.

Children generally move through two distinct developmental phases during the kindergarten year—one of caution, literalness, and general compliance; a second of experimentation, oppositional behavior, and uncertainty. Some aspects of these developmental phases result from visual and perceptual changes (as in letter and number reversals). Others are related to changing cognitive patterns as children move from pre-operational learning, bounded by the senses, to new and more complex, yet still concrete, thinking patterns. Like other changes, this shift in thinking patterns creates tension and disequilibrium.

As five-year-olds move toward six, visual and auditory confusions commonly show up in reversals of letters and numbers. The child is not sure which way things go and says so. "Maybe" replaces "Yes!" An emphatic "NO" may remind us of the "terrible two's." Children are testing the limits they were so comfortable with a few months ago. Earlier in the year, sitting still and listening was easier. Now there are wiggles and complaints and it's not uncommon to see children falling sideways out of their chairs. (At six, they often fall over backwards.)

As children move toward six, their language becomes more differentiated and complex. They like to explain things and to have things explained to them. Their behavior also becomes more complex. Children can play well one moment and argue the next. They may delight in independent activity or become instantly dependent on adult intervention. Sometimes they dawdle, sometimes they rush. Initiative drives them forward. The more they can do on their own, the stronger they feel. But they also hate to fail at tasks. With the support of sympathetic adults, however, five-year-olds will keep trying, and their efforts will engender feelings of self-worth and purposefulness. This prepares children to venture into a lengthy period of industrious learning between the ages of six and eleven.

Five-Year-Olds: Growth Patterns

PHYSICAL

- Focus visually on objects close at hand
- Need lots of physical activity, including free play
- Better control of running, jumping, and other large movements; still awkward with writing, handcrafts, and other small movements
- Pace themselves well, resting before they're exhausted
- Hold pencils with three-fingered, pincer-like grasp
- Often fall out of chairs sideways

SOCIAL-EMOTIONAL

- Like to help, cooperate, follow rules, and be "good"; want adult approval
- Need routines, along with consistent rules and discipline; respond well to clear and simple expectations
- Dependent on authority, but also have trouble seeing things from another's viewpoint
- Need verbal permission from adults; before doing something, will ask, "Can I ... ?"

LANGUAGE

- Literal, using and interpreting words in their usual or most basic sense: "We're late—we've got to fly!" means "We've got to take to the air like birds!"
- Express themselves in few words; "play" and "good" are favorites
- Often do not talk about school happenings at home
- Express fantasy more through actions and less through words than at four
- Think out loud—that is, they talk their thoughts

COGNITIVE

- Like to copy and repeat activities
- Often see only one way to do things
- Bound cognitively by their senses; not ready to understand abstract concepts such as "fairness"
- Ascribe life and movement to inanimate objects such as stuffed animals
- Learn best through active play and hands-on activities
- Think intuitively rather than logically; for example, "It's windy when the trees shake, so it must be the shaking of the trees that makes the wind"

Five-Year-Olds in the Classroom

Vision and Fine Motor Ability

- Still developing left-to-right visual tracking, so they tend to focus on one word at a time when reading; often need to use a pointer or their finger to keep their place
- Still have difficulty copying from the board
- Occasionally reverse letters and numbers (either swapping positions, as in writing "ot" for "to," or drawing the letters themselves backwards so that a "d," for example, looks like a "b"); teachers can help by accepting these reversals without comment, rather than correcting
- Ready for an introduction to manuscript printing; not able to stay within lines
- Find it hard to space letters, numbers, and words; using a finger as a separator helps

Gross Motor Ability

- As at four, continue to need a great deal of active outdoor and indoor physical activity
- Enjoy structured games such as Duck, Duck, Goose and Red Light, Green Light

Cognitive Growth

- Learn best through repetition; like to repeat stories, poems, songs, and games, sometimes with minor variations; enjoy sets of similar math and science tasks; need predictable daily schedules
- Some become stuck in repetitive behavior (for example, always drawing rainbows or flowers) for fear of making mistakes when trying something new
- Learn best through active exploration of materials such as blocks, manipulatives, clay, sand, and water
- Seldom able to see things from another's point of view
- Think out loud; will say, for example, "I'm going to move the truck!" before doing so

Social-Emotional Behavior

- Can work at quiet, sitting activities for fifteen to twenty minutes at a time
- Often need their teacher's release to move to the next task, though they can pace themselves while doing a given task
- Feel safe with consistent guidelines and carefully planned periods
- Express thoughts through action; need opportunities to play in housekeeping or other dramatic play corners
- Learn and practice language skills through teacher modeling and directed role play, as well as dramatic play

Five-Year-Olds: Curriculum

READING

Provide opportunities for children this age to:

- Do "partner" reading—peers helping each other through familiar books; more able readers may pair well with more beginning readers, but both need to play an active role (as in "parallel" reading)
- Have short chapter books read to them
- Write theme stories with classmates and turn them into books
- Strengthen their reading skills by reading predictable books (books with few words, much repetition, and many pictures)
- Learn phonics in small groups with children at similar skill levels
- Read labels, signs, posters, and charts identifying familiar objects in their environment

WRITING

Expect from these children:

- *Writing:* Labeling of drawings with initial consonants or vowels to stand for one feature in the drawing (as in "H" for "house" in a drawing of houses, people, and trees); tell stories in a single drawing and one or two words
- *Beginning Spelling:* Largely prephonemic or early phonemic—beginning to use initial consonants or vowels to represent words and sometimes stringing

continued on next page

WRITING

those initial letters together in "sentences" such as I STBFL (I see the butterfly)

- *Writing Themes:* Family, family trips, fairy tales, tales of good and evil, stories about pets, and stories about themselves and best friends
- *Handwriting:* Switch to three-fingered pencil grasp; tendency to write only uppercase letters; as understanding of spelling develops, use of irregular spacing between words

THEMATIC UNITS

Favorite themes for children this age:

- Families
- All about me
- My body
- Babies
- Pets
- Our school
- Seasonal themes in nature (snow, winter, hibernation)

MATH

Provide opportunities for children this age to:

- Count and sort, make sets, do simple addition and subtraction using real materials, and make graphs
- Practice writing numbers
- Do simple equations
- Continue hands-on exploration of size, shape, length, and volume

Changes as Children Move Toward Six

Although many of the characteristics of five carry over as children move toward six, increasingly unsettled behavior signals growth and change.

Older Five-Year-Olds: Growth Patterns

PHYSICAL

- Tend to be physically restless and to tire quickly
- Awkwardly perform tasks requiring fine motor skills
- Vary their pencil grasp
- Tilt their head to their nondominant side when writing
- Complain that their hand gets tired from holding their pencil
- Often stand up to work

SOCIAL-EMOTIONAL

- Oppositional; not sure whether to be good or naughty
- Insecure with feelings and tentative in actions
- Complain, test authority and limits, and strike out with temper tantrums
- Behave wonderfully at home and terribly at school, or vice versa
- Equivocate, switching answers from "yes" to "no" and vice versa

LANGUAGE

- Begin giving more elaborate answers to questions
- Tend to use more words than necessary to convey an idea
- Frequently make auditory reversals (answer first what they heard last)
- Often read out loud even when asked to read silently

COGNITIVE

- Begin to try new activities more easily
- Make lots of mistake and recognize some of them
- Learn well from direct experience

Older Five-Year-Olds in the Classroom

VISION AND FINE MOTOR ABILITY

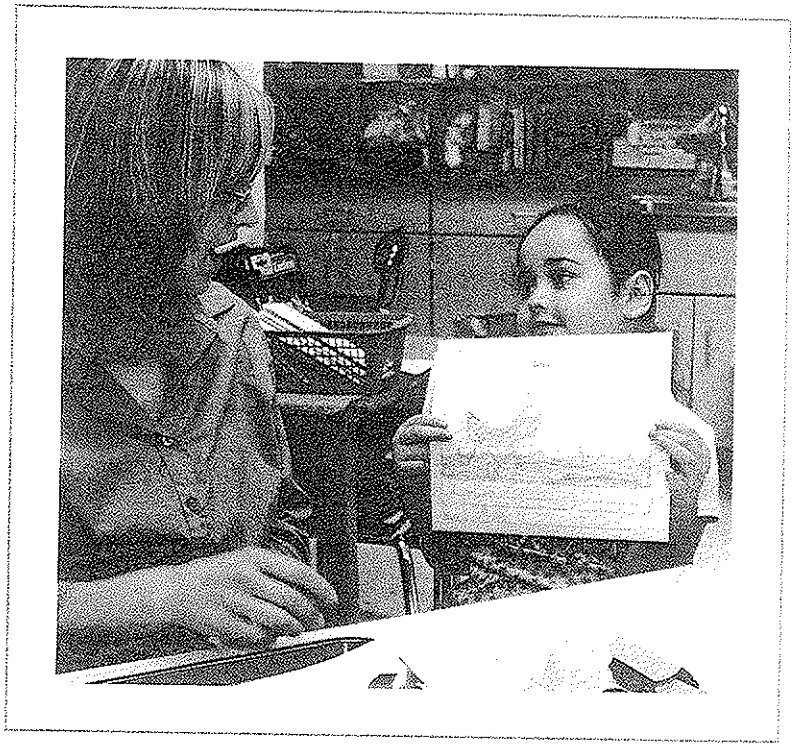
- Print less neatly and with more reversals than earlier in the year
- Grasp pencil very firmly; placing pencil grips on their pencils encourages relaxation
- Reverse letters and numbers with increasing frequency; may find reading and writing activities extremely frustrating if not closely related to their interests

GROSS MOTOR ABILITY

- Need a good deal of physical activity and relaxed, free play outside because attention is not always focused in a structured gym class
- Tire quickly; sometimes need shorter work periods than younger fives

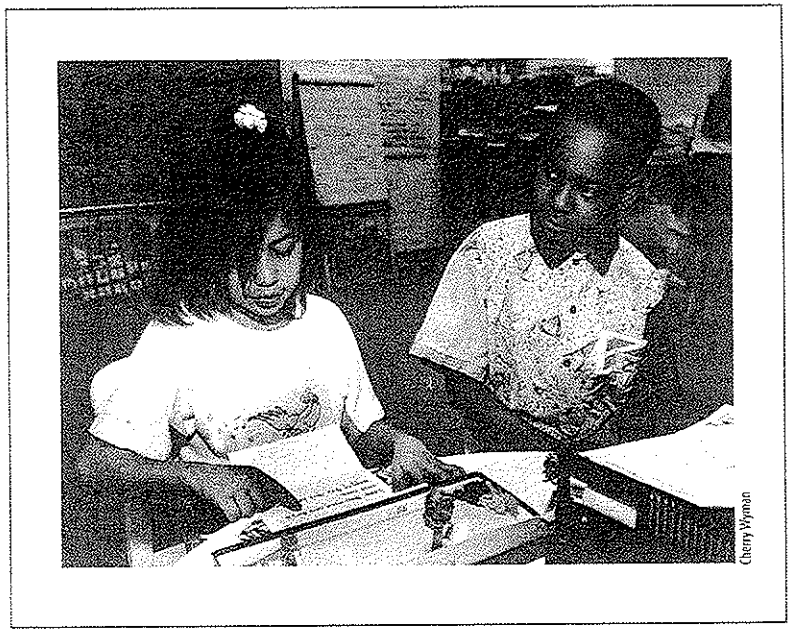
COGNITIVE GROWTH

- Still use language to initiate action ("I'm going to pet the dog"); begin to explain in more detail
- Need many avenues—building with blocks, painting, working with clay—to express what they know
- Need time to try their own ways of doing things, even though these ways may not prove productive
- Crave constant validation of their initiative



SOCIAL-EMOTIONAL BEHAVIOR

- Need consistent rules and discipline even more than earlier in the year
- Because children are testing limits more, harsh discipline (especially for mistakes) can be devastating; they respond better to frequent reminders and redirection ("Jimmy, what do you need to do to clean up?" "Lisa, hands in your lap.")



Six-Year-Olds

"But now I am six, I'm clever as clever.
So I think I'll be six for ever and ever."

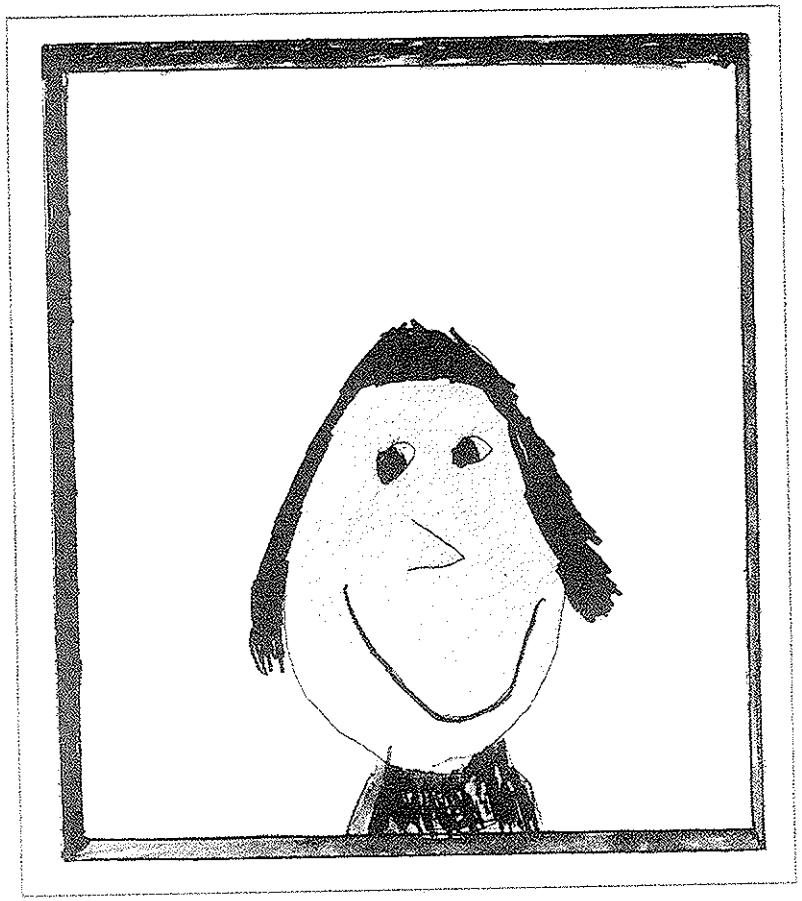
Now We Are Six | *by A.A. Milne*

One of my favorite children's books about school is *First Grade Takes a Test* by Miriam Cohen (1980/2006). In this book, the children are confounded by the experience of taking a timed test for the first time. They have to keep still, answer questions without help from their friends, and finish within a specified period of time. Several hilarious examples of six-year-old thinking show that sixes are not at all ready for formal testing. Here's my favorite:

On the test there was a picture of Sally and Tom. Sally was giving Tom something. It looked like a bologna sandwich. Underneath it said:

- ☐ *Sally is taller than Tom.*
- ☐ *Tom is taller than Sally.*

Jim wondered what being tall had to do with getting a bologna sandwich. And was it really a bologna sandwich? It might be tomato ... Jim took a long time on that one.



In today's educational environment, six-year-olds are often asked to master tests much more complicated than this. Understanding of young children's needs in the classroom seems lacking in today's standards-driven educational climate.

Six is an age of dramatic physical, cognitive, and social change. Tooth eruption is continuous; first grade teachers find chewed pencils, papers, and workbook corners in the first grade. Visual development is maturing, allowing for easy introduction of beginning reading tasks. Rapid physical growth is mirrored in rapid physical activity. Children are constantly in a hurry, rushing to be finished. They love to do their assignments, but are decidedly more interested in the process than in the product. Schoolwork tends to be sloppy or variable in quality. Children show great interest in being first, in doing the most work, or in the opposite extreme: Those who can't be first may gladly be last; dawdling can be a favorite pastime. Along with great bursts of energy come periods of fatigue and frequent illnesses.

"Industrious" describes the overall behavior of children at six. Classrooms full of six-year-olds are busy, noisy places. Talking, humming, whistling, and bustling are the order of the day. The children are now as interested in school work as in spontaneous play. The importance of friends now rivals the importance of parents and teachers in the child's social development, and children delight in cooperative projects, activities, and tasks. No job is too big, no mountain too high. Their enthusiasms, however, can outstrip their skills, and sixes risk an overpowering sense of inadequacy and inferiority as they tackle new frontiers. Teachers and parents need to remember that at this age, the process is more important than the product.

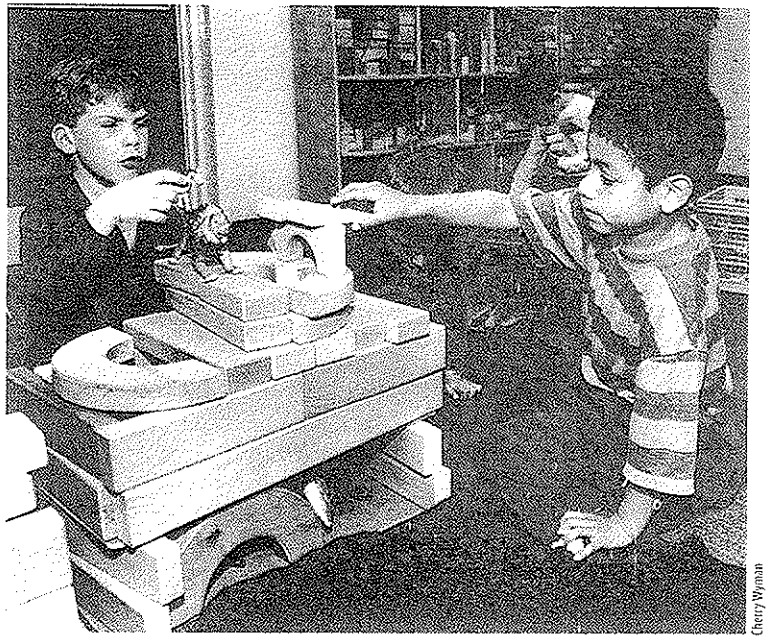
As the six-year-old works hard to order and structure the world in new ways, an ounce of encouragement produces a radiant smile, hugs, and excitement. An ounce of condemnation can produce tears, pouting, and withdrawal. A teacher's words, tone, and body language all have a great effect on six-year-olds.

It is at six that most children begin a major transition in their intellectual growth. When they are younger, children are unable to accommodate an adult view of reality and generally don't understand adult explanations of cause and effect (although they may accept such explanations without challenge). Now learning to approach the world more logically, children begin to organize concepts symbolically and systematically.

The beginning of reasoning is marked by the child's ability to identify differences, compensate for these differences, and reverse an idea through mental activity. In one classic example of child psychologist Jean Piaget's, a six-year-old will see two equal balls of clay as equal quantities even after one is rolled out into a clay "snake" and compared with the ball. Younger children, able to hold onto only one idea at a time, will see the "snake" as containing more clay because it is longer.

Most six-year-olds begin to show a shift in reasoning, an understanding of cause and effect in the natural world (for example, what makes the clouds move), and a widening vision. Sixes can begin to see another's point of view and consider rules and conduct with greater objectivity.

In many ways this is a key moment, a turning point, an open door. At six, the child is extremely receptive to all new learning. The eagerness, curiosity, imagination, drive, and enthusiasm of the six-year-old are perhaps never again matched in quantity or intensity during the life span.



Six-Year-Olds: Growth Patterns

PHYSICAL

- Good visual tracking from left to right
- More aware of their fingers as tools
- Noisy and sloppy; in a hurry; speed is a hallmark of six
- Often fall backwards out of their chairs
- Learning to distinguish left from right
- Because they're teething, they often chew on pencils, fingernails, hair, books, and other objects
- Tire easily; frequently ill
- Enjoy being active both outdoors and in the gym

SOCIAL-EMOTIONAL

- Want to be first
- Competitive; enthusiastic
- Sometimes "poor sports" or dishonest; invent rules to enable themselves to win
- Anxious to do well
- Thrive on encouragement
- Tremendous capacity for enjoyment; like surprises and treats
- Can be bossy, teasing, or critical of others
- Easily upset when hurt

continued on next page

SOCIAL-EMOTIONAL

- Care a great deal about friends; may have a best friend
- Less influenced by happenings at home than at school

LANGUAGE

- Enjoy explaining things; sharing about things they like helps develop their language skills
- Use boisterous and enthusiastic language
- Love jokes and guessing games
- Tend to complain frequently

COGNITIVE

- Learn best through discovery; love asking questions and trying out new games and ideas
- Better understand spatial and functional relationships
- Very ambitious and motivated to learn; may choose projects that are too hard
- Enjoy the process more than the product
- Love to color and paint
- Engage in more elaborate cooperative and dramatic play than at five
- Increasingly interested in computers
- Beginning to understand past and present and also how and why things happen
- Beginning to be interested in skill and technique for their own sake
- Like to "work"; enjoy reading and writing

Six-Year-Olds in the Classroom

VISION AND FINE MOTOR ABILITY

- Will copy from the board, but find it very difficult; some schools use personalized whiteboards
- When writing, find spacing and staying on the line difficult
- Ability to track visually from left to right readies them for reading instruction

GROSS MOTOR ABILITY

- Comfortable with a busy level of noise and activity; often work standing
- Can produce products of higher quality when encouraged to work more slowly or when teachers limit the number or complexity of tasks

COGNITIVE GROWTH

- Enjoy and learn from games of all sorts; poems, riddles, and songs delight them and teach more effectively than workbooks
- Experience an artistic explosion; children seriously experiment with clay, paints, dancing, coloring, book making, weaving, and singing; need to feel that their attempts are valued, that there is no right and wrong way to approach art; risk-taking now enhances later artistic expression and competence

continued on next page

COGNITIVE GROWTH

- Proudly produce a great quantity of work but are unconcerned with quality; whatever the activity—whether academics, cleanup, or snack—their delight lies in the doing (especially when doing for themselves)
- Need social studies content connected to here and now; find history difficult unless it is closely associated with the present
- Enjoy and learn much from field trips followed by representational activities such as telling about the trips or using blocks to recreate things they saw

SOCIAL-EMOTIONAL BEHAVIOR

- Use tantrums, teasing, bossing, complaining, and tattling to try out relationships with authority; learn best when adults understand but do not excessively tolerate this behavior
- Extremely sensitive—an ounce of encouragement may be all they need to get through a difficult situation; severe criticism can truly injure them
- Highly competitive, can overdo the need to win and be first; do better when teachers take the competitive edge off games used for learning
- Ready to try taking on individual and group responsibility

Six-Year-Olds: Curriculum

READING

Provide opportunities for children this age to:

- Continue to do partner reading
- Continue phonics learning by doing guided reading with the whole class and in small groups
- Continue reading predictable books while beginning to move on to easy chapter books
- Use writing, drawing, clay, painting, drama, or blocks to show their thoughts and feelings about a story
- Show their understanding of differences between genres (for example, poetry versus essay)

WRITING

Expect from these children:

- *Writing:* Story development still strongly influenced by drawings—for example, stories may be based on a collection of drawings; ability to write whole sentences, even if these sentences are early phonemic or use "letter name" spelling strategies—"I WNT TO HR HS" for "I went to her house"
- *Beginning Spelling:* Letter naming and "transitional" spelling (My frends ride bickes); emerging sense of phonetic clues
- *Writing Themes:* Best friends, school-related stories, family, pets, going on trips, new possessions, holidays, fantasy
- *Handwriting:* Proper grasp of pencil; letters the same size or slightly larger than at five and more sloppily written because children are usually in a hurry or experimenting with new letter formation; spontaneous mixing of uppercase and lowercase letters; unpredictable spacing

THEMATIC UNITS

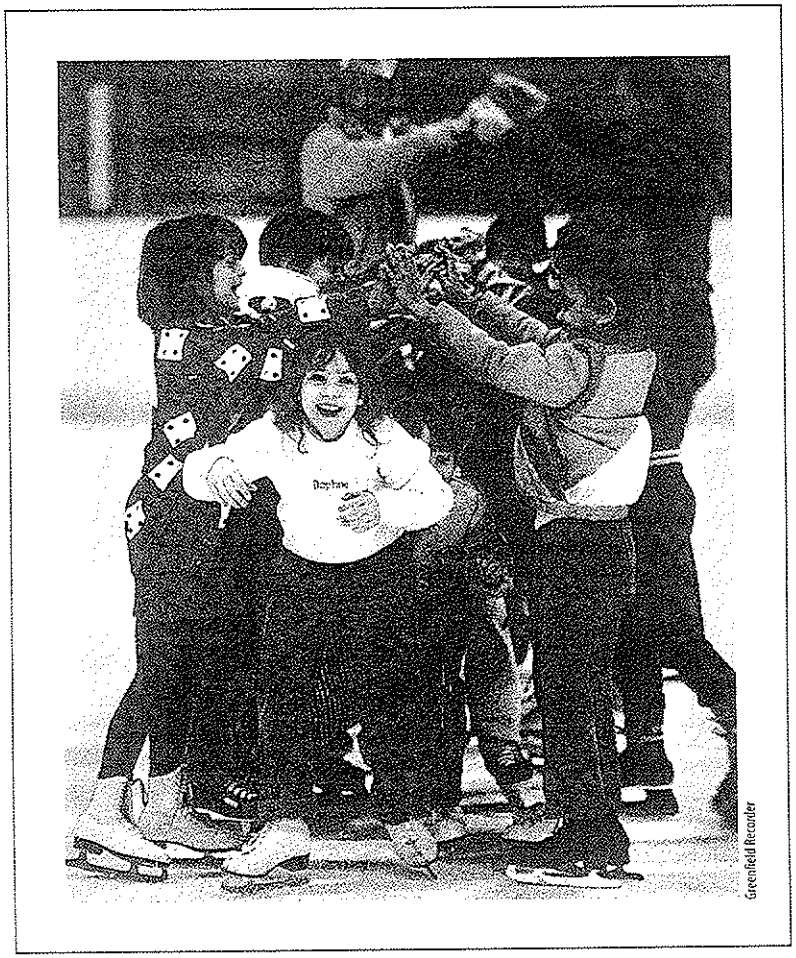
Favorite themes for children this age:

- Families
- Friends
- Our school
- Workers in our school
- Jobs people do in our community
- Nature topics (such as butterflies, seasons, plants)
- Losing teeth
- Cultural, racial, language, and other differences among people

MATH

Provide opportunities for children this age to:

- Do mental mathematics and problem solving after they've mastered the necessary skills with concrete materials
- Do basic computation with money, sometimes using a calculator or computer
- Complete simple worksheets to practice basic computation
- Experiment with reversing operations (+ and -)
- Do lots of measuring using the sand or water table, their feet, and blocks
- Work with manipulatives such as magnets, pulleys, puzzles, interlocking cubes, scoops, funnels, measuring cups, and sand



Greenfield Recorder

Seven-Year-Olds

"On a bicycle I traveled over the known world's edge, and the ground held. I was seven."

An American Childhood | *by Annie Dillard*

Years ago, Massachusetts teacher Bob Strachota devised a way to teach soccer to seven-year-olds that shows a clear understanding of the age, plus a streak of genius. Bob divides the field into three equal sections—a midfield and two goal zones. A class of twenty to twenty-two youngsters is first divided in half to make two teams. Each team is then divided into thirds, and a third from each team is assigned to one of three sections of the field. Thus, three to four players on each team are restricted to their third of the field. The play is fast and furious in each section, but as soon as the ball passes over a section line, the players in that section must only watch as play is passed on to the next section.

This adaptation of the game responds, almost poetically, to seven-year-olds' need for restriction, a need related to their tendency toward self-absorption and self-consciousness. "Sevens Soccer" at the Greenfield Center School, where Strachota teaches, enables all sevens to experience a measure of success on the playing field. Without these clear boundaries, many would choose to avoid altogether the perceived risks of actively engaging in the game. Others would dominate the field and show off for anyone watching.

Sevens can be extremely moody, sulky, and sometimes depressed. They are often content to spend long periods in their rooms, alone by choice, reading or listening to music or playing with animals or dolls. At school, too, they like to be by themselves and appreciate quiet corners for reading or working. They also like working with a best friend, although relationships may be on one day and off the next.

This is an inward, consolidating period of growth. Sevens have developed a good working concept of right and left and general directionality. Visually, they tend to focus on small details that are close to their eyes. Their tiny printing is anchored to the baseline of the paper, their finger grasp down on the lead of the pencil, their heads resting on their arm or desk as they write, sometimes with one eye closed. Because of their close-up visual concentration, sevens have great difficulty copying from the board, so this task should be minimized.

Sevens are hard workers and often perfectionists. Whereas sixes are fond of the pencil sharpener, sevens adore the eraser. If they make mistakes they will erase and erase, sometimes putting a hole right through the paper. They want to be correct and they want their work to look good, too. Because of this tendency, they take a long time with everything they do and get very upset when not given enough time to finish their work. Timed tests can be extremely upsetting for sevens. Unfortunately, second grade these days is requiring more and more of this type of assessment.

If you schedule a class of seven-year-olds to take a spelling test at the end of the week, requesting that they spell the words correctly and in their best handwriting, you are almost guaranteeing failure. Sevens can do their best work in spelling or in handwriting, but not both at the same time.

Sevens love the routine and structure of school and appreciate their personal relationship with the teacher. Substitute teachers

often feel frustrated with sevens, who constantly tell them, "That's not the way our teacher does it!"

In the classroom, sevens are good listeners and still enjoy being read a story. They show great interest in new words, number relationships, and codes. They like working and talking with one other person (while playing board and card games or working on puzzles) but don't always do well on group projects.

At six, children are noisy, verbal, active, and brash; at seven, they are quieter, more specific in their speech, passive, and sometimes tense. Sevens' industriousness is now concentrated on individual work. They home in on what they can do and practice it over and over. If someone copies their work, seven-year-olds can become extremely upset. Music lessons, often introduced at this age, can be both rewarding and frustrating.

"I quit!" is often heard at home and on the playground, but it's not because sevens don't get their own way, although that's a frequent interpretation. They may walk away from a group game or a family project because of an overwhelming feeling of inferiority. Sevens' feelings need to be protected. Teasing, joking, and especially sarcasm are painful to the seven-year-old. Being laughed at for a wrong answer or a "silly" idea can produce anger and tears.

At six, a child might respond to these feelings with a punch. Seven-year-olds are more apt to drive these feelings deep inside and are less apt to risk themselves the next time they are called on to answer in class or asked to do something. They are hypersensitive to physical ailments as well, both real and imagined.

Seven is an age where children are driven by curiosity and a strong internal desire to discover and invent. As they consolidate logical thinking, they begin to organize their internal mental structures in new ways. Now they can classify spontaneously: "Black bear, brown bear, grizzly bear, koala bear," they chant excitedly. They are intensely interested in how things work and love to take things apart and put them back together again, if they can. Working in a block corner holds as much fascination for the seven as for children at younger ages. Interlocking blocks and other small manipulatives are favorites, and sevens delight in making miniature accessories for their block structures or social studies dioramas.

Sevens are beginning to deal with concepts of time, space, and quantity with increased sophistication. Although they must still act directly on their environment if they are to learn, they are increasingly able to represent their understanding symbolically in writing and drawing. Writing can be a favorite activity when teachers give seven-year-olds extended periods to create their own stories.

Science and social studies take on new meaning as sevens show increasing interest in the world around them. This interest will expand through ages eight, nine, and ten, and children will begin to identify areas of personal enjoyment and concern. It's important for children to study and understand their own city or town before using textbooks to examine desert or mountain villages in foreign countries!

The child's increasing ability to do math without manipulatives, to infer, predict, and estimate, makes mathematical concepts particularly accessible at this age.

Seven is an age of intensity. Individualized activity consolidates new cognitive structures and feelings. A balance between hard work and self-assessment produces a sense of competence, setting the stage for greater self-direction at older ages.

Seven-Year-Olds: Growth Patterns

PHYSICAL

- Often keep their eyes focused on a small, close area
- Sometimes tense
- Like confined spaces
- Can be sensitive to many hurts, real and imagined
- Have improved physical abilities (for example, are better at playing sports)

SOCIAL-EMOTIONAL

- Inward-looking; sometimes moody, touchy, depressed, sulky, or shy
- May change friendships quickly and feel "nobody likes me"
- Need security and structure; rely on adults for help and constant reassurance
- Don't like taking risks or making mistakes
- Sensitive to others' feelings, but sometimes tattle
- Conscientious and serious; have strong likes and dislikes
- Keep belongings neater at home and school than at six

LANGUAGE

- Listen well and speak precisely
- Enjoy one-to-one conversations and like to send notes
- Rapidly develop their vocabularies
- Show great interest in meanings of words and enjoy all sorts of codes

COGNITIVE

- Enjoy repeating tasks and reviewing learning
- Like to work by themselves slowly and finish what they start
- Bothered by mistakes and try hard to make their work perfect
- Good at classifying—sorting buttons, pictures, leaves, shapes, etc.
- Like to be read to
- Enjoy board games as well as computer games
- Enjoy hands-on exploration—taking things apart and discovering how they work
- Increasingly able to reflect on their learning

Seven-Year-Olds in the Classroom

VISION AND FINE MOTOR ABILITY

- Writing, drawing, and numbers are tidy and small, if not microscopic; work with head down on desk, often covering or closing one eye
- Find cursive handwriting difficult, even if begun in earlier grades but usually achieve competency by third grade; copying cursive in workbooks is visually easier for them than copying from the board
- Anchor their printing and drawing to the baseline; find filling up the line space difficult
- Often hold pencil near point with three-fingered, pincer-like grasp that they find difficult to relax

GROSS MOTOR ABILITY

- Prefer board games to gym games; playground games such as jump rope, four square, and hopscotch are more popular than team or large-group activities

COGNITIVE GROWTH

- Need a classroom environment suitable for sustained, quiet work periods
- Because of their strong need for routine and closure, need time to finish their work; appreciate a "heads-up" that it's time to prepare for transitions
- May find timed tests especially troublesome
- Like to work by themselves or in two's

continued on next page

COGNITIVE GROWTH

- Enjoy memorization along with codes, puzzles, and other "secrets"
- Comfortable with emphasis on high-quality products and proper display of work
- Like to repeat tasks
- Like to review learning verbally or frequently touch base in other ways with their teacher
- Enjoy inquiry activities; often work well in "discovery" centers; like to collect and sort
- Not fully able to read without vocalizing—still sometimes whisper to themselves during "silent" reading

SOCIAL-EMOTIONAL BEHAVIOR

- Frequently change friends but accept teacher's seating assignments
- Prefer working and playing alone or with one friend
- Find classroom changes upsetting; need teachers to prepare them in advance when substitutes will take over the classroom
- Need humor and games to help moderate their seriousness
- Can get sick from worrying about tests, assignments, etc.
- Changeable; close communication between teachers and parents helps ensure their needs are understood

Seven-Year-Olds: Curriculum

READING

Provide opportunities for children this age to:

- Do less partner reading and more individual reading (their greater strength at this age)
- Continue phonics work; ready for intense phonics instruction in small groups
- Do written reading comprehension assignments

WRITING

Expect from these children:

- *Writing:* Longer stories with beginning, middle and end, including "chapter" books in some cases; great interest in the story line; tendency to include everything from "breakfast to bed"; writing before drawing and sometimes even writing without drawing; readiness to begin nonfiction writing as a way to show learning from science or social studies investigations
- *Spelling:* Correct spelling slowly emerging from transitional spelling; increased phonetic and sight word fluency; ease in learning capitalization and punctuation; readiness for formal spelling program (teachers should still accept "invented" spelling because children still do not see revision as necessary or important)
- *Writing Themes:* Family; friends; sleeping over; losing teeth; trips; pets (often including first stories about the death of pets); nightmares; worries about the death of family members, illness, war, famine, or other serious issues

continued on next page

WRITING

- *Handwriting:* Very tight pencil grasp down on the shaft of the pencil, often right on the lead; their letters are often microscopic in size and anchored to the baseline; not a good age at which to introduce cursive handwriting (better for younger or older children)

THEMATIC UNITS

(Social Studies, Science, Literature, etc.)

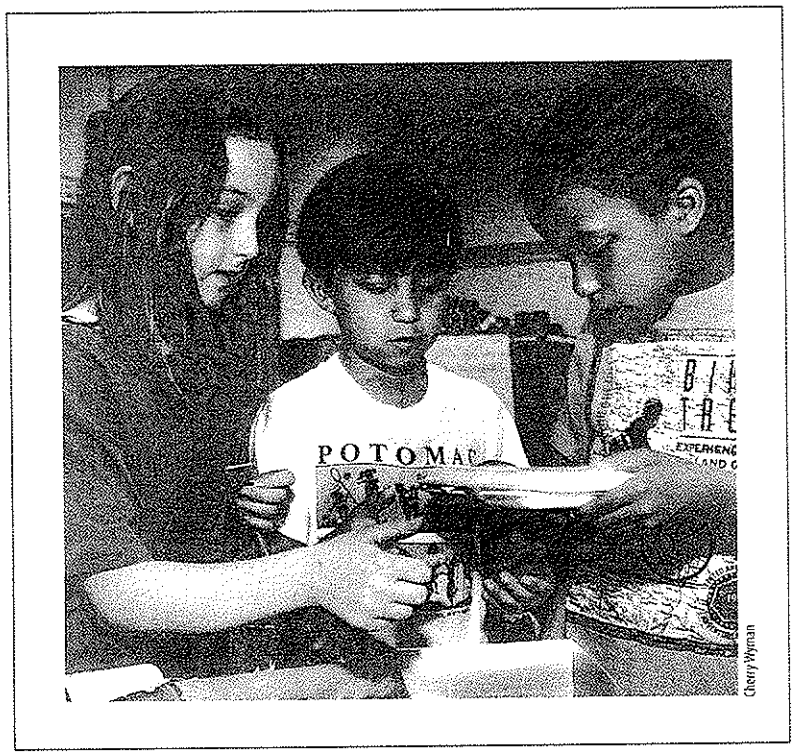
Favorite themes for children this age:

- Our neighborhood
- How systems work (plumbing, lighting, heating in our school; how we get our milk; how the cafeteria works)
- Jobs people do
- Things we are good at
- Cultural and racial diversity and discrimination
- Natural science topics (pond, forest, meadow, etc.)

MATH

Provide opportunities for children this age to:

- Do more computation with money and time
- Do more complex mental mathematics and solve equations
- Work with fractions by measuring, weighing, and comparing
- Experiment with symmetry and other simple geometry by using, for example, unit blocks or pattern blocks
- Do simple computation with multiplication; do division based on experience with concrete materials
- Continue practicing mathematical skills by playing games



Eight-Year-Olds

"Mothers for miles around worried about Zuckerman's swing. They feared some child would fall off. But no child ever did. Children almost always hang onto things tighter than their parents think they will."

Charlotte's Web | *by E.B. White*

"Teacher, we have a great idea!"

Watch out! Here come the eight-year-olds—full of energy, imagination and little sense of their own limits.

"We have this great idea to do a play about Rosa Parks and we have all the clothes at home and we're going to bring them in tomorrow and we can use your desk for the bus and we can make tickets and charge admission and we'll put it on tomorrow … OK?"

There's no thought of a script, assigning parts, rehearsal schedules, the hard work of learning lines, practice, set, and production. It's all a blur of enthusiasm tempered by only a vague understanding of how things get done.

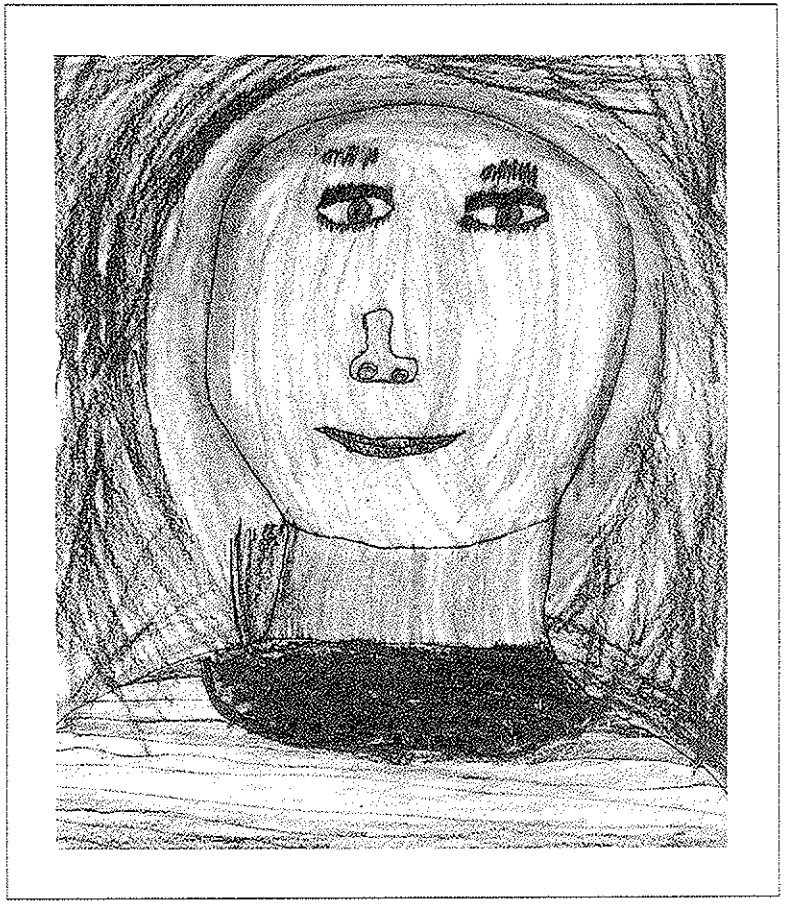
The job of the second or third grade teacher is to harness that eight-year-old energy and give it some direction and focus. Throughout the year, teachers need to help children cut work down to bite-size pieces. This includes homework assignments, which should never be longer

than a half-hour in duration and should be limited in scope and expectations. Children at this age need to experience "incremental success" in their school work—success in gradually increasing quantities and levels of complexity—so that they will continue feeling motivated and excited.

Eight-year-olds tend to gravitate toward their own gender when making choices about working and playing with others. Boys tend to be fascinated by the world of "smutty" jokes at this age, but both boys and girls enjoy virtually any kind of humor, including riddles, limericks, and knock-knock jokes.

A key developmental struggle for eight-year-olds is gaining competence over the tools of their trade. At school, this means industrious efforts in such areas as handwriting, handcrafts, computer skills, drawing and sketching, and simple geometry. But when accomplishments don't come easily or quickly, the children feel a strong sense of inferiority. Patience is not common in eight-year-olds. Again, assignments (in handwriting or spelling, for instance) need to be short and to the point. Drafts of children's work as well as beautiful, finished work should be liberally displayed in the classroom so that children can see the range of effort required to make progress toward mastery in a certain area. Children also benefit by graphing or charting their progress in certain areas, which helps combat that feeling of "I'll never get it ... I'll never be able to do this."

"I'm bored!" is a common complaint of the eight-year-old. Adult translation: "This is too hard! "Look beyond these words to what the children are showing you in their work. Encouragement and redirection go a long way. For example, to a child who's beginning to become frustrated with a math problem, a teacher could say, "It *is* a hard problem. But if you keep thinking and trying new things, I bet you'll get it." A child who's ready to quit after unsuccessful tries might be helped with a firm but gentle redirection: "Try it this way now. Then let's talk about what happens."



Often, parents and teachers lament about an eight-year-old, "He could do it if he only tried. He's lazy and unmotivated. He never sticks to any one thing for more than a day." Actually, the eight-year-old is exploring his potential. He may be struggling with feelings of inferiority as he tries out one new area after another in an expanding awareness of the broader world. This uncertainty will reach a peak at nine.

Eight-Years-Olds: Growth Patterns

PHYSICAL

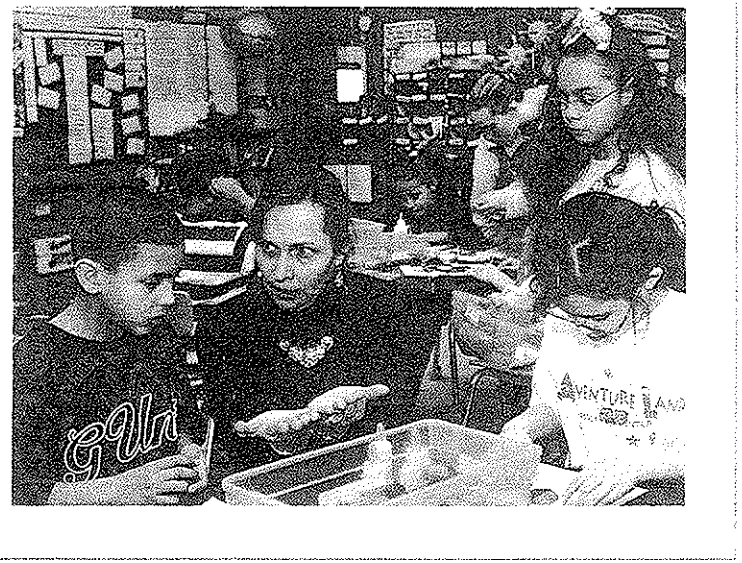
- Full of energy; do things in a hurry
- Need physical release through time to play outdoors
- Somewhat awkward
- Visually, focus well on both near and far objects

SOCIAL-EMOTIONAL

- Enjoy socializing and sharing humor
- Love group activities and cooperative work, preferably with peers of the same gender
- Adjust well to change; bounce back quickly from mistakes or disappointments
- Form larger friendship groups than at seven

LANGUAGE

- Like to talk, explain ideas, and use rapidly expanding vocabularies
- Tend to exaggerate
- Listen well, but they have so many ideas that they may not always remember what they've heard



COGNITIVE

- Have limited attention span but do become engrossed in the activity at hand; love to socialize at the same time
- Industrious, impatient, and full of ideas; work quickly and often take on more than they can handle
- Can use geometric solids, math counters, rulers, balance scales, and other manipulatives to explain their thinking and problem solving in concrete ways
- Beginning to master handwriting, handcrafts, computers, and drawing

Eight-Year-Olds in the Classroom

VISION AND FINE MOTOR ABILITY

- Better control of eyes and hands enables children to copy from the board and learn cursive writing; they love to practice writing but often produce sloppy work
- Pencil grasp should now be the same as an adult's; if not, they may still need a pencil grip placed on their pencil to help correct their grasp

GROSS MOTOR ABILITY

- Often experience a growth spurt; restless and need lots of physical activity; short exercise breaks (even in the classroom) help concentration
- Love group games on the playground; gravitate toward same-gender activities, so the teacher should lead whole-class games such as tag and soccer
- Play hard and tire quickly; benefit more from several short play breaks than one long one

COGNITIVE GROWTH

- Very industrious, but often exaggerate their own ability and have trouble knowing their limits; more short assignments, rather than a few long ones, build confidence through success in small doses
- Enjoy responsibility, although they do not always successfully complete tasks
- Care about both the process and the product of school work; want their peers' approval as much as their teacher's

continued on next page

COGNITIVE GROWTH

- Usually organize work well, though tend to be sloppy; some need the teacher's help with organizational strategies
- Show increasing interest in rules, logic, how things are put together, how things work, the natural world, and classification
- Can handle increasingly complex tasks but tire easily; may give up but soon want to try again

SOCIAL-EMOTIONAL BEHAVIOR

- Work best in groups at tables or at pushed-together desks; teachers should change groupings frequently throughout the year
- Prefer working and playing with peers of the same gender
- Respond well to class projects and traditions that build a sense of unity and cohesion
- As they develop a growing sense of moral responsibility beyond themselves, they become more interested in fairness issues and may argue about them
- Like stories that concern fairness and justice
- Enjoy studying other cultures

Eight-Year-Olds: Curriculum

READING

Provide opportunities for children this age to:

- Work in groups reading trade books (which are good for children at all ages) or in core reading programs keyed to their ability levels and organized around their interests
- Begin reading independently and doing simple independent assignments (such as making book covers, conducting interviews, and building dioramas); teachers should design these projects specifically to spur children's interest in reading and to let them show their comprehension
- Be read to from books with lengthier chapters and more advanced themes

WRITING

Expect from these children:

- *Writing:* Quite lengthy stories with increasingly descriptive language; interest in diverse kinds of writing such as poetry, newspaper articles, and cartoons; fascination with the "breakfast to bed" story line—tendency to provide more detail than any reader (except the author) would care to know; beginning understanding of the importance of making drafts and revising
- *Spelling:* Increasing ability to spell correctly; readiness to learn compound words, dictionary use, and alphabetical order; skill development to a level that makes lingering phonetic mistake patterns and real difficulty in spelling more obvious

continued on next page

WRITING

- *Writing Themes:* Adventure and "breakfast to bed" stories, animals, sports with friends and heroes, unicorns and other mythical beasts, stories based on cartoons, poetry about nature and the seasons, nonfiction writing that shows learning from concrete science and social studies investigations
- *Handwriting:* Good posture, good pencil grasp, and fluid movement of arm and hand across the page; readiness to learn cursive handwriting and to practice extensively; although easily frustrated, enjoyment of writing practice and motivation to become competent

THEMATIC UNITS

(Social Studies, Science, Current Events)

Favorite themes for children this age:

- Our neighborhood, our community (interdependence)
- Community institutions (bank, newspaper, radio)
- Long ago or far away (but not both)
- Topics in nature (trees, rocks, animals, etc.)
- Cultural and racial diversity

MATH

Provide opportunities for children this age to:

- Solve math problems using all four operations, as well as borrowing and carrying
- Study fractions by measuring, weighing, and doing some pencil and paper tasks
- Explore geometric patterns constructed with pencil and paper
- Use games as a way to practice math strategies