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How Children Develop and Learn



Research on child development that has accumulated over the past 75 years has provided a deep knowledge and understanding of children. *The Creative Curriculum*, which is based on this research, will show you how to apply what has been learned about children to everyday practices in the classroom.

This chapter explains the first component of the *Creative Curriculum* framework—how children develop and learn. Knowing how children grow and develop is the basis for planning your program, selecting materials, and guiding children’s learning. By knowing, we mean appreciating general patterns of growth in all children as well as the differences you will certainly encounter in individual children.

This chapter is divided into three sections.

What preschool children are like—social/emotional, physical, cognitive, and language development and typical qualities of 3-, 4-, and 5-year-olds

Individual differences—variations in gender, temperament, interests, learning styles, life experiences, culture, and special needs

The *Developmental Continuum*—a tool that maps children’s development and guides teachers’ planning



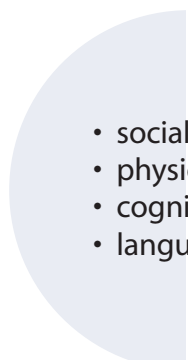
What Preschool Children Are Like

The preschool years—ages 3–5—are a special time in the life of young children. During this period, they begin to trust others outside the family. They gain independence and self-control, and learn to take initiative and assert themselves in socially acceptable ways. At the same time, they become keen observers of their world and experiment with their surroundings to find out what happens when they interact with other people and handle and maneuver objects and materials. Their language surpasses the limited vocabulary and sentence structure of toddlers.

Preschoolers use thousands of words and complex phrases and sentences to communicate. As they learn to understand others and express their ideas more effectively, their environment becomes larger and richer. In addition, preschoolers are changing physically—growing and gaining strength, agility, and coordination.

Areas of Development

For the sake of discussion and clarity, child development may be divided into four areas—social/emotional, physical, cognitive, and language. While the division is both necessary and useful, it is somewhat artificial. In reality, development does not divide neatly into categories. Rather, the four categories are closely related and often overlap. Development in one area affects and is influenced by development in all other areas. This reality requires teachers to pay attention to every area when guiding children's learning.

- 
- social/emotional
 - physical
 - cognitive
 - language

Take, for instance, reading and writing. You are working in language development when you talk to children and help them realize that print conveys a message. Social/emotional development comes into play when you expect children to handle books independently or to work cooperatively to use magnetic letters. Physical development is required for using writing tools (chalk, pencils, markers) and cognitive development, when children act out the parts of a story in correct sequence.

Below, we describe the four areas of development. The purpose of the description is to give you a framework that will help you focus on particular areas and, at the same time, keep the whole child and the interplay of development in mind.

Social/Emotional Development

Social/emotional development during the preschool years is about socialization—the process by which children learn the values and behaviors accepted by society. It is also about becoming a competent and confident person.

goals

There are three goals for social/emotional development.

Achieving a sense of self: knowing oneself and relating to other people—both children and adults.

Taking responsibility for self and others: following rules and routines, respecting others, and taking initiative.

Behaving in a prosocial way: showing empathy and getting along in the world, for example, by sharing and taking turns.

Social and emotional competence are essential to children's well-being and success, in school and in life. With the current focus on readiness, accountability, and high standards, there is always a danger that programs will focus only on academic content and ignore aspects of development that are equally important for achieving long lasting and positive results.

A Good Beginning: Sending America's Children to School with the Social and Emotional Competence They Need to Succeed (The Child Mental Health Foundations and Agencies Network, 2000, p. 7) provides evidence that social/emotional readiness is critical to a successful kindergarten transition, early school success, and even later accomplishments in the workplace. The report describes a child who is socially and emotionally ready for school. This child is

- confident, friendly, able to develop good relationships with peers
- able to concentrate on and persist at challenging tasks
- able to communicate frustrations, anger, and joy effectively
- able to listen to instructions and be attentive

Social and emotional readiness can be taught and nurtured most effectively when children are young. Because preschool is a prime setting for gaining social and emotional competence, social/emotional development is an important focus for teachers.

Physical Development

Physical development includes children's gross (large muscle) and fine (small muscle) motor skills. Physical development is sometimes taken for granted in the early childhood classroom because it is often assumed that it happens automatically. Not only is this assumption untrue, but teachers need to remember that physical development is just as important to learning as every other area of development.

With more advanced physical development, children master increasingly sophisticated tasks and gain personal responsibility for their own physical needs, such as dressing themselves. In addition, physical development, in many ways, promotes social/emotional development. As children learn what their bodies can do, they gain self-confidence. In turn, the more they can do, the more willing they are to try new and challenging tasks. Thus, a positive cycle, which effects learning overall, is established.

The benefits of promoting physical development are well documented. The Surgeon General's Report on *Physical Activity and Health* (1996) states that physical activity contributes significantly to personal health and well-being. Physical education in the early grades supports children's academic achievement, general health, self-esteem, stress management, and social development. And we know from brain research that moving the body literally wakes up the brain.

Physical activity contributes significantly to personal health and well-being.

There are two goals for physical development.

goals

Achieving gross motor control: moving the large muscles in the body, especially the arms and legs, consciously and deliberately. Gross motor control includes balance and stability; movements such as running, jumping, hopping, galloping, and skipping; and physical manipulations such as throwing, kicking, and catching.

Achieving fine motor control: using and coordinating the small muscles in the hands and wrists with dexterity. As these fine muscles develop, children are able to perform self-help skills and manipulate small objects such as scissors and writing tools. The achievement of fine motor skills generally lags behind gross motor development.



Cognitive Development

Cognitive development refers to the mind and how it works. It involves how children think, how they see their world, and how they use what they learn.

goals

There are three goals for cognitive development.

Learning and problem solving: being purposeful about acquiring and using information, resources, and materials. As children observe events around them, ask questions, make predictions, and test possible solutions, learning reaches beyond just acquiring facts. Persistence and knowing how to apply knowledge expands their learning even further.

Thinking logically: gathering and making sense of the information by comparing, contrasting, sorting, classifying, counting, measuring, and recognizing patterns. As children use logical thinking, they organize their world conceptually and gain a better understanding of how it works.

Representing and thinking symbolically: using objects in a unique way, for instance, a cup to represent a telephone, or a broom to represent a horse; pretending, for instance, to be mommy or a firefighter; portraying the world through charts or pictures, for instance, making a graph to show changes in the weather over time or a drawing to show what happened to a character in a story. Representations and symbols free children from the world of literal meanings and allow them to use materials and their imagination to explore abstract ideas.

One of the joys of observing children's cognitive development is seeing their minds expand. Preschoolers use their imaginations and are creative in their thinking. They can be an astronaut one minute and pretend to be a baby the next, trying out the roles and tasks associated with each. The ability to take on another's perspective leads them into friendships where they can share feelings and experiences. They can also capture their feelings in a clay sculpture or recreate a visit to the fire station with puppets or paints. Cognitive growth in preschool children is remarkable to witness.

Language becomes the principal tool for establishing and maintaining relationships with adults and other children.

Language Development

Language development includes understanding and communicating through words, spoken and written. Children are born with the capacity to communicate with others—verbally and non-verbally. By the time they reach preschool, their ability to communicate thoughts and feelings through spoken language takes on new importance. Language becomes the principal tool for establishing and maintaining relationships with adults and other children.

Because words represent objects and ideas, language development is closely related to cognitive development. With frequent language experiences between the ages of 3 and 5, children's vocabulary can grow dramatically. The richer a child's vocabulary, the more likely that the child will become a good reader. Language and literacy skills go hand in hand. Listening, speaking, reading, and writing develop interdependently in children.

There are two goals for language development.

goals

Listening and speaking: using spoken language to communicate with others, enlarging one's vocabulary, expressing oneself, understanding the oral speech of others, participating in a conversation, and using language to solve problems.

As children learn to listen and speak, they gain control of themselves and their world, relate effectively to others, and gather and store more and more information.

Reading and writing: making sense of written language, understanding the purpose of print and how it works, gaining knowledge of the alphabet, writing letters and words.

When children begin to read they gain access to new worlds of information and faraway places, including the world of imagination. Writing things down expands memory, communication, and understanding.

Ages and Stages of Development

In addition to viewing the four developmental areas (social/emotional, physical, cognitive, and language) one at a time, teachers may find it useful to look at development in another way. Here we look at development in 3-, 4-, and 5-year-olds, the preschool years. Children at each age demonstrate some very predictable behavior. You can anticipate, for example, that 3-year-olds often find sharing difficult. Rather than trying to force 3s to give another child a turn with a favorite toy, it makes more sense to have duplicates of popular toys available. As children learn to trust you and their school environment, you can set up systems for taking turns. Once children know there are sufficient toys for everyone, and that they will get a turn even if they have to wait, sharing becomes less of an issue for them.

Three-Year-Olds

Threes are often described as being in transition. They more closely resemble 4- and 5-year-old preschoolers than 2-year-old toddlers. What sets them apart from toddlers more than anything else is their newfound ability to express themselves in words and ideas. This ability opens up a whole social world.

What sets 3s apart from toddlers more than anything else is their newfound ability to express themselves in words and ideas.

Social/Emotional Development: Three-year-olds are learning to trust that their parents, teachers, and other important people in their lives will take good care of them. Trust gives them the confidence to become independent and, in turn, to feel pride at being able to brush their teeth and dress themselves—just as their parents do. Threes want you to notice their newly acquired skills, for instance, being able to set the table or pedal a tricycle. While social competence is beginning to emerge at this time, it does not develop fully. The very social 3-year-old can turn egocentric and “me” oriented quickly.



Physical Development: The play of 3-year-olds is typically more sustained and focused than toddlers' play. Gross motor activities such as running, swinging, throwing and catching a ball, and dancing to music are great sources of pleasure for this age group. But so, too, is quiet play, such as using puppets and painting a picture. And something unheard of to a 2-year-old can happen to a 3-year-old: putting a puzzle together for the eighth time may be more fun than playing with a ball.

Cognitive Development: Three-year-olds are exploding with thoughts and ideas. They use all of their senses to make sense of the world around them. However, the ability of 3s to classify and understand their world is only at a beginning level. They can sort objects but usually by only one characteristic at a time. Their egocentric nature generally keeps them from seeing another person's point of view, though this limitation may be affected by circumstances. Many are able to show empathy, and you may see a 3-year-old bringing a special toy to a child who is upset.

Language Development: In this area, 3-year-olds take off. While most 2-year-olds utter only the basic language sounds, most 3s have mastered all sounds, perhaps with the exception of “f,” “l,” “r,” “s,” “sk,” and “th.” Most 3s can use plural terms, talk in sentences, recite simple rhymes, and ask questions. They can tell you their first and last names. They love to share their thoughts with you and participate in conversations.

Four-Year-Olds

Fours are working on many of the same developmental tasks as 3s, but at a higher level. Because their language can be so fluent, you may assume they understand more than they actually do. For instance, they use the word, “why,” frequently, creating the impression that they want an explanation. Yet, often, your explanation of “why” is not nearly as important to a 4-year-old as the fact that you are giving her your full attention.

Social/Emotional Development: Fours are a wonderful mix of independence and sociability. They like doing things on their own. They take great pride in imitating adult behaviors, but also love playing with others, especially in groups of two and three. Making friends makes sharing easier. Whether playing alone or in a group, 4s tend to be very expressive, using actions and facial expressions as well as words to get their points across.



Physical Development: Fours are increasingly able to control their muscles. Whereas most 3s go down steps putting both feet on the same step before climbing down, most 4s speed down steps, alternating their feet. The leg muscles of 4s allow them to maintain a rhythmic stride in running. They play enthusiastically on slides, swings, and all outdoor play equipment. Their fine motor coordination improves dramatically as well. On their own, they can wash their hands, button their coats, and use Velcro straps. Some are coordinated enough to cut intricate lines with scissors, zip their coats, and make an attempt at tying their shoes.

Fours approach the world with great curiosity and use their imaginations to understand it.

Cognitive Development: Four-year-olds act like budding scientists. They are enchanted by principles of cause and effect and always want to know why things happen. They approach the world with great curiosity and use their imaginations to understand it. However, because separating reality from fantasy is hard for them, they can have irrational fears. All of a sudden, the closet may be home to an unwelcome monster. They also might do what many might describe as “lying.” For example, after knocking over a glass of milk they might insist that they didn’t do it, truly believing that what just happened was beyond their control. Developmentally, they are struggling with the differences between truth and fiction. In the attempt to discover the boundaries, the truth often is stretched.

Language Development: The language of 4-year-olds progresses rapidly. They usually can understand and use words such as “in,” “by,” “with,” “to,” “over,” and “under.” They love to talk, be spoken to, and listen to books. Trying out new words—including bathroom (potty) language—delights 4s. They like to use big words and deeply enjoy their ability to communicate.



Five-Year-Olds

By the time children turn five, they have gained security about who they are and their place in the world. This is a fascinating age group.

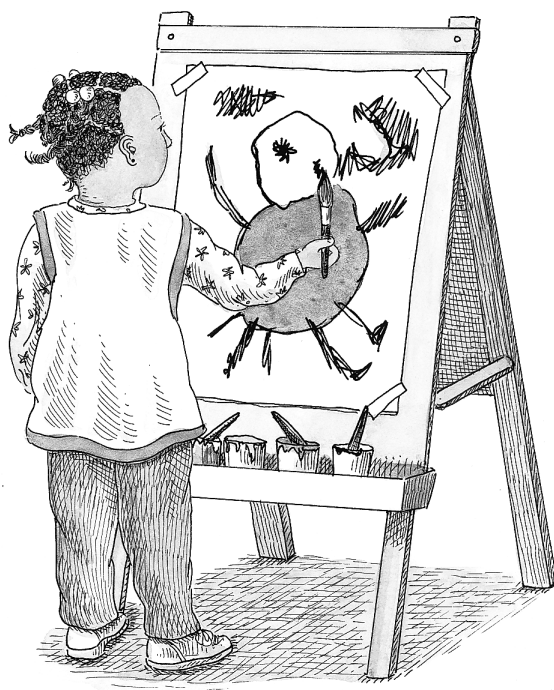
Fives have gained security about who they are and their place in the world.

Social/Emotional Development: Fives are increasingly independent, self-sufficient individuals. They are dependable and responsible and enjoy having praise lavished on them for their reliability. In many ways, they are model citizens: obedient, eager to tend to their own personal needs, protective of others, proud to go to school, and usually polite and even tactful. Fives are also exceedingly social. They seek out friends, typically having one or two special playmates. Overwhelmingly, 5s prefer cooperative play to solitary or parallel play. Because the outside world holds great appeal, 5s like taking trips and exploring their environment.

Physical Development: Five-year-olds show more agility, balance, and coordination than 4s in both gross motor and fine motor movements. They can jump rope, ride a bike with training wheels, and stand on their tippy toes. Fives can control a paintbrush, weave ribbons, and write letters and numbers with increasing accuracy.

Cognitive Development: Fives learn new concepts through experimentation and discovery. They solve problems and make predictions by observing the objects and people in the world around them and by making connections to what they already know. They are able to think in complex ways,

relating new information that they collect and process to things they knew previously. They can understand concepts of color, size, and shape. They also can categorize by two features, such as color and shape.



Language Development: Five-year-olds show significant growth in their communication skills. They produce sentences that have adult-like word order, using pronunciation like a grown-up. They speak not just in sentences, but in paragraphs. For the most part, their grammar is correct. They ask relevant questions. In short, communicating with a 5-year-old is like communicating with anyone who speaks your language. Five-year-olds also begin to extend their oral language skills to reading and writing.

Your knowledge of the predictable aspects of child development and the typical behaviors of 3-, 4-, and 5-year-old children give you a general basis for planning your program. However, it is important to remember that each child develops on an individual timetable and may respond to your program in different ways. Therefore, you should take the time to get to know each child and to appreciate each child's special characteristics. What works for one child may not work for another.

Individual Differences

A second aspect of knowing the children you teach is learning what makes each one unique. No matter how much children may resemble each other in their patterns of development, every child brings specific interests, experiences, and learning styles to your classroom. Therefore, you will need different strategies to help all children succeed as learners.

Think about the children in your classroom. Perhaps you have a child who loves to experiment. His curiosity frequently gets him into trouble, though, because he never seems to stop exploring—even during naptime. Or, perhaps you have a child who is artistic and loves to dance. In fact, it seems that she can only learn something if she is twirling while she listens.

Your understanding of individual differences will help you respond to children in ways that make every child feel comfortable and ready to learn. Perhaps the most obvious difference in children is gender. Children also have different temperaments, interests, learning styles, and life experiences. They also are strongly influenced by their cultural backgrounds. And some children have special needs or are learning English as a second language.

Gender

As adults, each of us has personal beliefs about what it means to be male or female. Children, however, are still learning what it means to be a girl or a boy. Therefore, teachers need to create a classroom environment where children feel safe in exploring gender-related roles and taking part in activities that are related to these roles.

Making assumptions about children based on gender is easy. It's also easy to back up these assumptions with research and one's own observations. For example, boys tend to like gross motor play, while girls are quite content playing with little people figures and can do so for extended periods of time. Boys engage in parallel play quite happily, while girls tend to like to play cooperatively together. Girls are more likely to make representational drawings and write their names at an earlier age than boys.

But biology is not destiny. Learning and the way we treat children also play a role in how boys and girls behave. As Katherine Hanson (1992) notes:

In child care settings, with infants and children between 13 months and two years, research shows that child care providers respond to the children based on their own sex role beliefs, and they use the child's gender to guide their responses. . . . Adults were more likely to respond when girls used gestures or gentle touches or talked, and when boys forced attention through physical means or cried, whined, or screamed. . . . (p. 1)

Create a classroom environment where children feel safe in exploring gender-related roles and taking part in activities that are related to these roles.

Do you expect boys' play to be of the "rough-and-tumble" type and girls to be "well-behaved"?

Because personality as well as biology plays a role, teachers should ensure that both boys and girls receive positive messages about who they are and what they are capable of doing. You need to be aware consciously of your own beliefs and assumptions that affect the way you teach. Think about your own experiences growing up. What messages did you receive about how boys and girls were expected to behave? Do you expect boys' play to be of the "rough-and-tumble" type and girls to be "well-behaved"? What are the implications of these attitudes, and do you want to pass them along to the children you teach? You may hear children tell each other, "Girls can't build with blocks" or "Boys don't dress up." They are repeating messages they have heard from others or listened to in the media.

Remember that during the early childhood years, children will take the opportunity to learn and explore new ideas if they are given the benefit of a safe place. Play is one of the vehicles they use to work out new understandings. Teachers should capitalize on their play to have them test their ideas about gender and to think more flexibly about what girls and boys can and cannot do.

Teachers can help children to challenge their expectations. You can create an environment that allows children to explore assumptions and feel comfortable. Think about the pictures you display and the books you read to children. Are there strong female role models? Do they include men in nurturing roles?

As you get to know the children in your classroom, take note of how gender differences influence children's behavior and your own expectations. Help children to see that your classroom is a place where they can explore freely and feel comfortable in the process.

Temperament

Temperament is best defined as behavioral style. For example, some children are slow to warm up. They approach new situations cautiously, without a fuss and adapt slowly. Others have an immediate positive response to new situations and are generally cheerful and have regular patterns of behavior. Still others withdraw or protest in new situations, and their behavior is fussy.

Research suggests that temperamental differences can be identified even in newborns. There are significant differences in the way babies respond to different stimuli, for instance, loud noise or gentle rocking. Related research done by Stella Chess and Alexander Thomas (1996) examined how the temperament of newborns influenced the development of their personalities in several areas.

1. **Activity level**—How active is the child? How long can he sit still?
2. **Biological rhythms**—How predictable are the child's sleeping and eating habits?
3. **Tendency to approach or withdraw**—Does the child readily join in group activities?
4. **Adaptability**—How does the child react to a new or stressful situation?
5. **Sensory threshold**—At what point does a child become bothered by too much noise, changes in temperature, different tastes, or the feel of clothing?
6. **Intensity or energy level of reactions**—How does the child respond to the emotions he feels?
7. **Mood**—Does the child have a positive or negative outlook?
8. **Distractibility and attention span**—Is the child readily distracted from a task by things going on around her?
9. **Persistence**—How does the child handle frustration or initial failure on a task? How long does he stay with a task?

Children with different temperaments need to be treated differently.

Thanks to this research we know about the constitutional differences in children. Science also has demonstrated a related principle—that children with different temperaments need to be treated differently. For example, knowing that Carlos is easily distracted, you can offer him a quiet place to look at books and turn off the music when he is trying to concentrate. Similarly, realizing that Setsuko tends to be shy, invite her to enter a dramatic play episode by asking her to join you and another child at the table for “tea.” While research has shown that temperament is inborn, providing suitable support for children can make a difference. An active child can calm down, and an easily distracted child can expand his attention span.

Further, because environment does have an effect on temperament, you should not be surprised to learn that a child may be very different at home and at school, or that a child who likes to play actively with his peers becomes much quieter around adults.

The important message to *Creative Curriculum* teachers is to take note of each child's temperament in a variety of settings. Doing so will help you to make appropriate decisions. Understanding how children are likely to react to the people and events in their life can make you a more responsive and effective teacher.

Interests

Another way people demonstrate their individuality is through their likes and preferences. Sometimes for no apparent reason, a particular topic interests a child and holds his attention and fancy over a length of time. One child may be fascinated by monkeys, another by helicopters or trucks. One child loves hip-hop music; another will not go anywhere without a baseball cap.

Children's interests are a built-in motivator for learning. For example, you can attract a child who is interested in monkeys to reading and language by having a book on monkeys available or reading it aloud. You can involve a child who loves to dance by having taped music available in your classroom. You can supply your Dramatic Play Area with a variety of baseball caps to motivate the cap wearer to spend time there.

Teachers who are aware of the interests of their children have a basis for building a relationship and for motivating each child to learn.

If you have a child in your group who is difficult to engage or does not use speech to communicate, try to find something that really interests him. Use that interest to help him interact with others and develop communication skills. For example, a child who is skilled at using computer programs can be encouraged to help other children with less technology experience. Teachers who are aware of the interests of their children have a basis for building a relationship with and motivating each child to learn.

Knowing individual children's interests is also a good guide for planning possible long-term study topics. If a housing development is going up across the street from your school and you've observed that Derek is fascinated by trucks and that Crystal is constructing towers with blocks, you might consider a long-term study on construction. Knowing the related interests of other children will help you think of ways to extend the study and sustain it over time.

Whether or not you are able to incorporate individual children's preferences into classroom studies, make it a practice to nurture their interests. By doing so, you convey the message that you value what is important to them. You also help them gain new skills and confidence.

Learning Styles

Every person has a preferred way of learning. Some people are visual learners. Some learn better by listening while others have to handle something physically before they can understand it. One style is not better than another—it's simply the way a person learns best.

You probably will observe at least three different styles of learning in your group of children.

- listening
- looking
- moving

Auditory learners, or children who learn best by listening, are attuned to sounds and words. They solve problems by talking about them. Auditory learners can follow verbal instructions and explanations. You can build their knowledge base by describing in words what they do: "When you added coffee grounds to the paint, it changed the way the paint feels when it dries." You also can ask open-ended questions to encourage children to verbalize their thoughts: "What's that you're making for the baby dolls' breakfast?" The more opportunities you provide listeners to hear and verbalize concepts, the more they will learn.

Visual learners, or children who learn best by looking, are drawn to color, shape, and motion. They actually think in images or pictures, taking in what they hear and see and transforming it into images in their brain. It is as if they have a movie camera in their mind.

Visual learners benefit when you show them how things are done, rather than just telling them verbally: "Come here, Jonetta. Kate can show you how to put the interlocking blocks together so that you can build with them." Visual learners also remember ideas and concepts better when they are attached to an image: "Let's make a graph of all the different types of shoes we're wearing today." "Zach, I know that you're sad that your Daddy had to go away. Why don't you draw a picture about the way you're feeling?" Children who learn by looking need to make visual representations of their thoughts and feelings to learn.

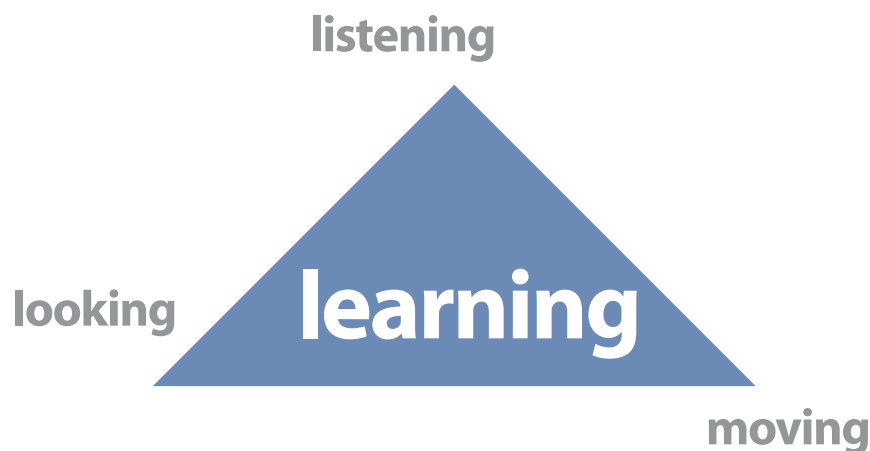
Kinesthetic learners, or children who learn best by moving, are generally well coordinated and confident in their bodies. Touching and feeling things and transforming ideas and information into movement boosts their memory and understanding.

Have you ever seen a preschooler twirl around as she tries to remember something? This twirler might be a kinesthetic learner. Something in the process of physically moving triggers her brain to learn a concept or idea. Kinesthetic learners benefit by knowing that it's okay to get up and move around. You can facilitate their learning by relating concepts to their bodies, "When I push down on your head, Setsuko, you can feel the pressure. That's what a vise does to a piece of wood . . . it holds it down and in place."

Since not all children learn in the same way, teachers should take all styles of learning into account. Traditionally, schools have appealed primarily to auditory learners, and to a lesser extent, to visual learners. Kinesthetic learners have had to adjust their natural way of learning to do well in school.

Teachers should make sure that they present information so that children who are listeners, lookers, and movers can all be successful learners.

Rather than expecting children to adjust, teachers should make sure that they present information so that children who are listeners, lookers, and movers can all be successful learners. Moreover, brain research shows that the more ways you allow children to explore a concept, the more likely they will remember what they learn. So, in addition to meeting the needs of all children, you can maximize learning by crafting learning opportunities for children with every learning style—the listeners, the lookers, and the movers.



Life Experiences

In addition to other individual differences, varying life experiences contribute to the uniqueness of each child. Consider how each of these factors may affect the children you teach:

- family composition, including the number and gender of parents or guardians present in the home
- child's birth order, including the number and spacing of siblings
- presence of a chronic health problem or disability in a family member
- exposure to violence, abuse, or neglect
- home language(s)
- the family's culture and religious practices
- the type of community in which the child lives
- the kinds of work family members do
- age at which parents gave birth to or adopted first child
- economic status
- living situation, including history of moving
- parent's/guardian's level of education
- parent's/guardian's job history, including work-related travel
- special circumstances such as separation and divorce; birth or adoption of a new sibling; how many different people/places child is with each day

Life circumstances affect a child's ability to learn.

Life circumstances affect a child's ability to learn. Firstborn children, for example, often tend to be responsible—to follow directions faithfully and be the first to volunteer to help. The fifth child in a family of seven may crave attention and go to extremes to be noticed, including picking fights. A child with an alcoholic mother may feel that life is unpredictable and that trusting others is risky. In contrast, a child with a stable home life may be independent and confident.

Try to be aware of each child's life circumstances when he or she enters your program. Talking with family members and taking notes about what you learn is an important first step. During the school year you can encourage parents to communicate with you about anything new taking place in children's lives.

Culture

Culture influences the way people think and interact with others. It affects an individual's choice of words, tone of voice, facial expressions, use of gestures and personal space, and reaction time. Cultures also have different norms for asking questions, responding to questions, and conversing with adults. Sometimes cultural practices come from ethnic, racial, or religious influences. Others are specific to a geographic location or economic level.

- A child may have learned to value reflection as an approach to learning. This child has been taught that thinking about what he has just learned is more important than getting through a project quickly. If his teacher regards speed as an indication of mastery, the child will appear to be a slow learner—not the competent and thoughtful child he is.
- In some cultures, it's rude to look the teacher in the eye or to answer a question too quickly. Children in these cultural groups may be uncomfortable with these expectations and be startled if the teacher leaves no wait time between asking a question and expecting a response.
- Some children are unfamiliar with questioning as a teaching technique. They may be confused because they feel the teacher already knows the answers to the questions she asks. The children's lack of response might be interpreted incorrectly as a lack of knowledge or attention.

Children learn the norms of their culture at the same time and in the same way they learn to speak a language. Like multiple intelligences, the values and norms of one culture cannot be said to be better than those of another. Cultural norms are just the way things are done in a child's family and community.

Because the role of culture is so important, you need to learn about, understand, and respect its influence on all the children you teach. This guideline doesn't mean that you have to be fluent in every language children speak and an expert on all cultural practices. It does mean, though, that you need to learn as much as you can about each child's family background. Talk with parents and other family members to better understand their family environment and culture. Consult with colleagues and experts to help you develop appropriate expectations.

Learn as much as you can about each child's family background.

You can weave aspects of different children's cultures into the curriculum through the materials you select, the topics you choose to study, and the strategies you employ. By doing so, you give children the message that each and every child is important and worthy of respect. A *Creative Curriculum* classroom in rural Alaska, for example, would likely feature salmon fishing and its influence on people's lives. A migrant Head Start program in Maine might highlight life in a migrant camp of blueberry pickers. A military child development center in Sicily might have lots of materials and props related to shopping at the PX and living at the foot of a volcano.

In a *Creative Curriculum* classroom, whatever is real to these children and their cultures is what you will find. For this reason, no *Creative Curriculum* classroom is exactly like any other. And no one program looks the same from year to year.

Special Needs

A child is considered to have special needs if he or she is outside the typical range of individual differences. We have to be very careful in thinking about special needs, however, because labels such as “gifted” or “disabled” can obscure important information about children. Giftedness and disabilities are both aspects of a child, not the whole child. A child may have areas of giftedness or a particular disability, but rarely does either influence every aspect of development. For example, a child might be well ahead of her peers in reading but lack social skills or the ability to think logically. Similarly, a child may have a physical disability that prevents him from walking but have well-developed language skills. Labels do not help us understand the whole child; they interfere. Teachers should look at each child as an individual.

Gifted Children

Some children in your class may be developmentally ahead of their peers. You may notice that their conversation and language are more complex. They may have learned to read and write on their own and always have a book in their hands. They may solve puzzles quickly, ask questions about big numbers, surprise you by being able to add and subtract, or have interests that seem unusual for their age.

Children with advanced intellectual skills are called “gifted.” While we tend to think of only intellectual giftedness when we use the term, children can be gifted in any number of areas. Gardner's work on different kinds of intelligences shows that people can be gifted in at least eight different ways. A child in your class may be athletically advanced, a talented musician, or an incredible artist.

Like all children, gifted children need to be challenged or they will become bored and frustrated.

Even though cognitive, language, social/emotional, and physical development are all interrelated, giftedness rarely extends to all areas of development. In fact, gifted children frequently have very uneven development. Some young children who are cognitively gifted master physical tasks only when they are presented in a cognitive context. Thus, a cognitively gifted child may understand the theory behind playing cooperatively with other children. However, when it comes to doing this task in real life, he has trouble.

Because of false expectations, many adults have difficulty believing that a child who is gifted in one area is not gifted in all. Why would a child who is mature enough to read pick fights or have temper tantrums? Teachers must be careful to note areas that need strengthening in children as well as those children's gifts.

Like all children, gifted children need to be challenged or they will become bored and frustrated. The more the child feels challenged and stimulated—both at home and at school—the more confident he will be to take risks and expand his talents.

The most important thing to remember is not to dwell on the preschool child's gifts and single her out. Rather, observe the child, follow her lead, and then create an environment where she feels supported and challenged. Attention to individual needs is what gifted children need most.

Children With Disabilities

Approximately 8 percent of American children have a disability (U.S. Department of Education, 2000). While there are many types of disabilities, most can be described as developmental delays and medical, emotional, or physical problems. In addition, increasing numbers of preschool children are being identified as having attention-related disorders and autism.

Some children will come to preschool with formal documentation of a specific disability. Since 1976, special education law and regulations have required that a child with a diagnosed disability who is eligible for special education services have an Individual Education Program (IEP). This document answers basic questions about the nature of a child's disability and what must be done to meet his educational needs. It contains goals and objectives and a description of how the disability affects access to the general curriculum. In an IEP, the types of special education services a child needs to access the curriculum are designated.

In an IEP, the types of special education services a child needs to access the curriculum are designated.

IEPs sometimes can make teachers without a special education background feel overwhelmed. To overcome any such discomfort, take a step back and reflect. Approach this child as you would any other child in your classroom. Ask yourself what special needs this child has. What behaviors does he exhibit that may be interfering with his learning? What adjustments could be made to the environment and curriculum that would enhance this child's ability to learn?

Seek out specialists who work with the child, and ask for strategies to help you.

Seek out specialists (trained professionals such as occupational or physical therapists or speech-language pathologists) who work with the child, and ask for helpful strategies. Some will be based on the child's strengths, needs, interests, talents, background, learning style, temperament, and the unique nature of the classroom. Others will aim to remediate weaknesses.

A strategy or set of strategies that is effective for one child with a particular condition may not be appropriate for another child with a similar diagnosis. Together with a specialist, assess and identify children's needs for assistive technology. Such needs might include large-print books for those with visual impairments, auditory trainers for those with hearing deficits, language devices for those with communication difficulties, or physically adaptive equipment for those with orthopedic impairments.

Think of children with disabilities as children first.

Keep in mind that a disability, like giftedness, is only one aspect of a child, not the whole child. Think of children with disabilities as children first. A child in your room may be in a wheelchair or use a hearing aid. Rather than defining these children by their disability—e.g., visually impaired, Down's syndrome, autism—it's more helpful to think of them as preschoolers with all that being 3–5 signifies.

Children with disabilities have a wide range of abilities and needs. For instance, some children with disabilities also may be gifted. It is neither possible nor helpful to think of children with disabilities as a homogenous group. For these and other reasons, focus on what children with disabilities can do and then build on their strengths.

Whether you work with children who are disabled in self-contained classrooms or in an inclusive program, *The Creative Curriculum for Preschool* is appropriate for all 3- to 5-year-old children. The Curriculum's emphasis on organizing the physical environment to promote learning is especially important for children who require structure and predictability in their lives. Children with autism, for example, demonstrate varying degrees of need in communication, social relationships, and play content.

While there are many different theories on interventions for children with autism, all of them have in common the belief that these children need to be actively engaged. Therefore, they can do very well in a *Creative Curriculum* classroom. As children talk and play together in the atmosphere of a *Creative Curriculum* classroom, they become models, supports, friends, and tutors to the child with autism.

Throughout *The Creative Curriculum*, reference to strategies that might be used to help include children with disabilities always will be related to specific behaviors, rather than any identified conditions. Therefore, you can plan and individualize for these children as you would for every other child whom you teach.

Ultimately the goal for children with disabilities is the same as for children without disabilities: to help them access the curriculum and maximize their potential. This is what meeting individual needs is all about!

Second Language Learners

Children whose primary language is not English—“English Language Learners” (ELLs) or “Second Language Learners” (SLLs)—are very likely to be in your classroom, if not now, then in the future. The number of children who speak a first language that is not English has increased dramatically and continues to increase in the United States. The Census Bureau predicts that by the year 2025, Hispanic and Asian Americans will represent one-quarter of the entire U.S. population (U.S. Census Bureau, 2000).

The depth of children’s knowledge of their primary language can vary just as it does in children who speak only English at home.

You may have children who are learning two languages simultaneously. Others will arrive in your classroom never having even heard English spoken anywhere, except perhaps on television. You may have several non-English speakers who share a common home language. Or you may have children whose first languages vary from Turkish to Rumanian to Vietnamese. The life circumstances of these children can be very different.

Just as children with the same disability may have very different strengths and needs, children learning English as a second language vary greatly. For instance, the depth of children’s knowledge of their primary language can vary just as it does in children who speak only English at home.

Some children come from language-rich home environments and arrive with strong language skills in their primary language. Others from homes where adults may not be very verbal and rarely read books to their children have a poor foundation on which to build language skills.

Teachers should be aware of cultural and individual variations that affect a child's ability to understand how to function in the school setting and to use language to communicate with others. For some, the school environment may be very comfortable; for others, it can be totally confusing and foreign.

A number of misconceptions about learning a second language can cause unnecessary anxiety in teachers and parents. The chart below dispels some of these common misunderstandings (Genesee, n.d.; Snow, 1997).

Myths About Learning a Second Language

Myth	Reality
Children who are exposed to more than one language are at a clear disadvantage.	Bilingual children are often very creative and good at problem solving. Compared to children who speak one language, those who are bilingual can communicate with more people, read more, and benefit more from travel. Such children will have an additional skill when they enter the workforce.
Learning a second language confuses a child.	Children do not get confused, even when they combine languages in one sentence. Mixing languages is a normal and expected part of learning a second language.
Learning a second language as a preschooler invariably will slow down children's readiness to read.	Actually, the opposite is often true. Bilingual children make the transition to decoding words well.
When children are exposed to two languages, they never become as proficient in either language as children who have to master only one language.	As long as they are exposed consistently to both languages, children can become proficient readily in both languages.
Only the brightest children can learn two languages without encountering problems. Most children have difficulty because the process is so complex.	Nearly all children are capable of learning two languages during the preschool years.

The preschool years are a prime time for learning languages.

Research summarized in *Preventing Reading Difficulties in Young Children* (Snow, Burns, & Griffin, 1998) stresses the importance of supporting children's continued learning in their primary language while, at the same time, fostering their ability to learn to speak English. The research on brain development shows that the preschool years are a prime time for learning languages. Keep in mind these two very important findings:

- Children who develop a sound foundation in their first language are more efficient in learning the second language.
- Concepts and skills that are learned in the first language will transfer to the second language.

Being exposed to rich experiences in two languages is a definite asset. All children can benefit from learning another language.

Stages of Learning English as a Second Language

If you have children in your classroom who are learning English as a second language, knowing the complexity of the task and the stages children are likely to go through can be very helpful (Collier, 1995). As in all areas of development, children vary in their approaches to acquiring English as well as in the rate at which they acquire the new language. Preschoolers also vary in their readiness to demonstrate what they can say in their new language.

The chart on the opposite page lists the stages you can expect second language learners to go through, and what you might see children do at each stage.

Stages of Learning a Second Language

Stage	What You Might See
Home language use	Children use only their home language with teachers and other children.
Non-verbal period	Children limit (or stop) the use of their home language as they realize that their words are not understood by others. This period can last from a few months to one year. Children may use gestures or pantomime to express their needs.
Early speech	Children begin using one- and two-word phrases in English and name objects. They may use groups of words such as "stop it," "fall down," or "shut up," although they may not always use them appropriately.
Conversation	Children begin to use simple sentences in English like the ones they hear in their environment. They may begin to form their own sentences using the words they have learned. Like all young children, they gradually increase the length of their sentences.
Use of "academic" language of school	Children begin to acquire English associated with specific content knowledge while they continue to develop social language.

You may see characteristics of more than one stage in a child at any time, and the length of time children remain at a given stage varies. Recognize too, that children may mix their languages. For example, a child may speak in Spanish but insert an English word he has just learned, or a child speaking English may insert a Spanish word that he needs but doesn't know in English. Sometimes children will speak phrases in one language and then switch to another language. Language mixing or switching is perfectly normal and not necessarily an indication of a language problem.

As you become familiar with the process of learning a second language, you can monitor children's progress more effectively and support their learning and development. If you view learning a second language as a valuable experience and one that can enrich your classroom, all children will benefit, not only those who don't yet speak English.