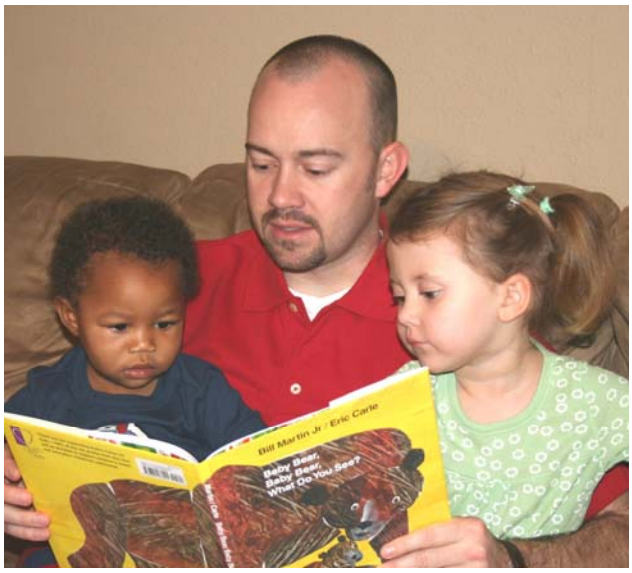
Arkansas Children's Week
April 19-25, 2009

Together We Learn



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Thank you to the readers of *QI DIRECT* for sharing your stories.

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A little girl in a kindergarten classroom was trying to create a pattern with pattern blocks. She was having some difficulty with it and began to get frustrated. Another little girl, who had already finished her pattern, asked her if she needed help. The two girls worked together until they got it right. How great would our world be if our adults could use that same initiative?

Catilin Korensek
Early Childhood Student
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" Why must we expect the child to be interested in counting the petals of the flowers before he has planted, nurtured, and gathered or arranged them?"

Patty Smith Hill

Patty Smith Hill, 1868-1946, was a pioneer in the United States Kindergarten movement. She was director of the Louisville Kindergarten Training School and professor and department head, Kindergarten Education, Teachers College, Columbia University. Hill was a founder of the National Association for Nursery Education (later the National Association for the Education of Young Children). Find out more about Patty Smith Hill and other pioneers:
http://www.kdp.org/about/laureates/laureates/pattyhill.php
http://www.naeyc.org/about/history.asp

What We've Learned About Children

Our work begins with a solid knowledge of child development. How exciting that no matter how much we have learned about children, there is always more to learn!

The Fascinating First Year

This is an amazing year of growth and development! Over the course of this first year, the child's weight will approximately triple and she will grow about ten inches. She will learn to lift her head and chest, roll over, sit up, creep, crawl, and finally stand, and will explore the world around her with her hands, feet, and mouth. Grasping skills develop as she discovers her toes and learns to reach for objects and people. During this first year, she will grow from being fed, to eating soft foods and holding a bottle independently, before developing the ability to successfully finger feed solid foods!

She recognizes the sound of the human voice from birth, and soon learns to distinguish parents, family members, and other familiar adults. As her hearing and vision improve, she may become apprehensive of unfamiliar people. With patience and time, she can grow to trust and bond with new caregivers. During this year she learns to return a smile and communicate with the people in her world.

The infant's first communication is a means of expressing the most basic of needs, including hunger and discomfort. As the year progresses, she is able to express more complex needs and ideas. Verbal communication progresses from cooing and gurgling, to back and forth "baby talk" exchanges, to the emergence of first words. Non-verbal communication may include waving, blowing kisses, and even sign language. She understands many words long before she can speak, and her receptive language will outweigh her expressive language for years to come. In addition, even very young babies are responsive to tone, facial expressions, and body language.

Cognitive growth occurs at a rapid rate during this year. The youngest infants respond to light and sound, and learn to visually track a moving object. As the year progresses, baby learns to look for an object that falls out of sight, and will try to move to reach a desired toy. She may drop objects on purpose, and she may enjoy "peek-a-boo" games. She is constantly observing and exploring her world, and learns best when there is plenty to see and do. Towards the end of this year, the child engages in a tremendous variety of activities, including banging objects together, dancing, scribbling, and looking at books.

Learning together with children from birth to one year

- The youngest infants thrive on being held as much as possible. Close human contact during these first months is irreplaceable.

- Hold and carry young infants in a manner that allows them to see the world around them.

- Share positive, physical touch by rocking, hugging, holding, and patting baby's back, as well as through physical games, such as bouncing and clapping.

- Provide the smallest group size possible, with as many caring adults as possible. There is no such thing as too many loving laps!

- Provide consistent caregivers to allow the child to feel secure and form trusting relationships with adults.

- Protect the youngest infants from the more active play of older infants and toddlers.

- Provide plenty of room to crawl and explore. Avoid leaving babies in swings, seats, or Exersaucers.

- Sing, talk, and smile with babies throughout the day. Talk to her about what she is seeing, feeling, and doing; even if she can't talk yet, your words will stimulate language development.

- Respond to the infants attempts to communicate. Imitate her sounds, and engage in talkative/babbling play.

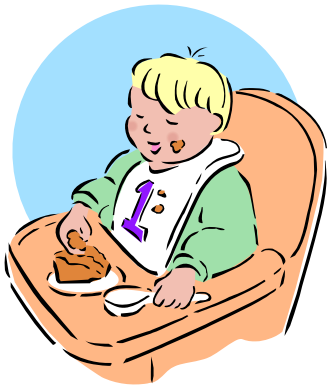
- Provide a wide variety of materials that allow baby to safely experience variety of texture, transparency, weight, color, and sound. For example, provide rattles made of wood and plastic, rattles of various colors and sizes, and rattles that clatter, jingle, and chime.

- Strive to create a baby-safe environment. Everything in the space should be safe for little hands and mouths, and furnishings should be sturdy enough to allow baby to pull up and stand without injury.

- Provide outdoor experiences. Even very young infants can enjoy stretching out on a blanket on a beautiful day!

- Remember that every child develops differently, in her own time.

Wondrous Age One



By the time of the first birthday, a strong and meaningful **bond has developed between the child and trusted adults**, especially parents. Tears are not uncommon when a favorite adult is out of sight! New caregivers take some time to get used to; the child may be shy or anxious at first.

A keen observer of the world around her, the one-year-old begins **imitating adults and older children** when playing. Telephones, pots and pans, and other props become popular for play. She is also busily **building self-help skills**. While she is still very dependent on adults, she'll appreciate the time and freedom to try new skills on her own, such as brushing her hair, finger-feeding, and drinking from a cup.

The child is curious about almost everything, and often experiments with **cause and effect**. Peek-a-boo is a favorite game, and making faces in the mirror can be a delightful pastime. She may engage in repetitive behaviors, such as dropping a spoon from the high chair tray over and over, banging two blocks together to make a noise, or filling and dumping containers of toys. These repetitive actions, and tests of caregiver responses, are a natural part of learning.

One-year-old children have mastered **the art of moving** around the room, though they do so in a wide variety of ways. Some scoot on their bellies, some crawl, and some begin to walk. Most children can pull themselves up to stand while holding on to solid objects. The one-year-old has no concept of physical boundaries, and may crawl into shelves and under chairs, or attempt to climb. As motor skills and coordination develop, he will begin to stack a few blocks, scribble with a crayon, roll a ball, clap hands, and pick up smaller objects using a pincer grasp.

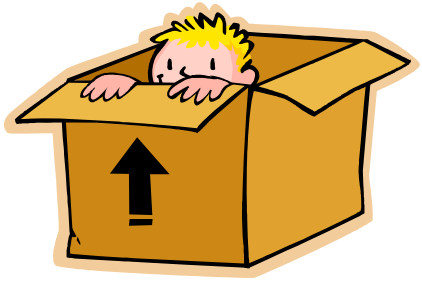
The **foundations for language** are falling into place. During this year, children become more and more attentive to adult speech. Sounds are used to gain attention and express meaning, and first words are spoken. Soon, exclamations such as "uh-oh!" and favorite animal sounds follow! Books of favorite objects are popular, especially when shared with an adult who points to and names each object. The child also becomes adept at communicating with gestures, such as pointing, waving "bye-bye", and shaking her head to say "no". The introduction of simple sign language can create additional opportunities for successful communication by the one-year-old child.

Learning together with one-year-olds

- Provide duplicates of favorite items, such as balls and toy telephones.
- Offer a variety of objects and materials to explore. Look for items that safely allow children to experience different textures (hard, soft, silky, rough, fluffy); materials (wood, metal, cloth); sizes; and weights.
- Include many open-ended materials, and allow inventive play. A block may become a telephone, or a bucket may become a drum! Seek the child's point of view: what is she seeing, doing, and learning as she plays?
- Organize toys and materials to facilitate successful play. A toy box full of random pieces does not encourage meaningful play!
- Share singing, clapping, chanting, and dancing with children.
- Provide a variety of non-breakable mirrors. Consider mirrors at various heights on the wall, on the backs of shelves, and even on the floor.
- Encourage simple cause-and-effect experiments by providing containers to fill and dump, tubes to roll balls through, and scarves for playing "peek-a-boo" with favorite toys!
- Allow plenty of time for meals and routines. Rather than rushing, provide time for children to dabble and play in the water while washing hands, explore foods and feed themselves at meals, and attempt self-help skills, such as putting on socks and shoes.
- Diapering times and other 1-on-1 routines can be more than just a chore! Use this time to talk and sing with children.
- Describe what the child is seeing, hearing, feeling, and doing. Acknowledge the child when she does something all be herself or discovers something new!
- Acknowledge the child's attempts to communicate, and provide new words for things that the child is interested in.

Terrific and Talented Twos

The two-year-old is slowly but surely developing an **awareness of other children**. Although he remains primarily "me"-centered, he has learned names of classmates, and may even recognize other children's parents and siblings. He may begin to show more enthusiasm for playing around other children as he observes their play carefully before duplicating their actions and sounds himself. Complex skills such as negotiating and turn-taking have not developed yet, so **scuffles over toys and space are common**.



Pretend play brightens the day. Dolls emerge as favorite toys, as do trucks and toy animals. **Short, simple games** are enjoyed over and over again, and the two-year-old child enjoys dabbling with paint; scribbling with crayons, chalk and markers; and kneading play dough. **Art activities** are process-oriented; children enjoy the colors, textures, and effects of the materials with little or no thought of creating a final product. **Fine motor skills and problem solving skills** are growing daily, and the child may focus on tasks such as screwing and unscrewing jar lids, scooping and pouring sand or water, stringing large beads, and stacking small blocks. Sorting by shapes, colors, and other attributes often emerges during this year.

By age two, children have generally mastered walking. This is **perhaps the most active age of all**, and children enjoy running, climbing, simple ball play, digging, hopping, and tumbling. Rocking toys and ride-on toys without pedals are popular, as are large toys that can be pushed and pulled. Small tricycles with pedals frustrate many young two-year-olds, but the skill is often mastered as the year progresses.

This is an **age of independence**! The two-year-old may refuse help and insist on trying things alone; "no" is often a favorite word. He may be self-reliant to the point of defiance at times, but he thrives when he can return to the loving arms of a nurturing adult when he is tired, frustrated, or simply in need of reassurance.

Language skills grow by leaps and bounds during this year. The child's vocabulary increases from around 50 words to hundreds of words, and simple phrases and sentences are often used. Pronouns appear in speech during this year. Receptive language skills are growing, too. The two-year-old understands and follows simple instructions, and comprehends the meaning of many more words than he uses.

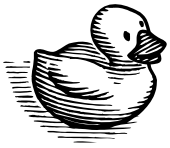
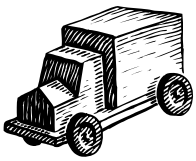
Learning together with two-year-olds

- Provide safe, acceptable outlets for active play, indoors and out. Look for ways to allow children to safely challenge themselves as they build gross motor skills.

- Offer plenty of duplicates of popular toys, and offer children protected places to play with favorite toys. Teacher/parent strategies such as careful supervision and redirection allow children to feel that they can play safely near other children.

- Build on children's awareness of children and adults by creating a photo book of familiar faces.

- Provide props to encourage more complex dramatic play. Consider blankets and bottles for dolls, food bowls and brushes for stuffed animals, and toy animals and vehicles to enhance block play. Allow children to take the lead as you join in their pretend play.

- Provide materials that encourage fine motor skills and sorting/matching skills. Consider offering "real-life" materials, such as a basket of various socks to match and fold or a set of appealing containers with lids to open and close. Seek materials that allow children to experience variety, including size, shape, texture, weight, transparency and composition.

- Allow carefully-supervised exploration with sand, water, and non-toxic art materials.

- Facilitate children's budding awareness of the natural world with non-toxic classroom plants, an aquarium, and/or a window bird feeder.

- Encourage children's language acquisition by providing new words throughout the day!

Thoughtful Threes

Three is a **social age**! The three year old becomes more and more involved in play with other children. She is often openly affectionate to children and adults alike, and may delight in acts of kindness, such as picking flowers for the teacher or drawing a picture for a special friend. She still has trouble understanding the point of view of others, though, so conflicts related to turn-taking and leadership roles are common. The three-year-old also struggles to understand the difference between accidental and "on-purpose" events; her feelings may be deeply hurt if a classmate hurts her unintentionally. It is not uncommon to hear a three-year-old yell at a stray toy for "making her" trip!

Three-year-olds **thrive on routine**, and may become flustered if things don't happen in the usual way. They experience a wide spectrum of intense emotions, and can swing from one emotion to another quickly. She lives very much "in the now" – the wants, needs, and events of the moment govern her actions, and she may not be able to focus on benefits and consequences down the road.

Strong attachments to favorite toys have developed, and the three-year-old is often an "expert" on a favorite topic, such as trains, dinosaurs, or princesses. **Pretend play** continues to be a favorite pastime. Popular themes include mothers/fathers and babies and "puppies and kitties". The three-year-old thrives on **repetition**, often repeating the same pretend games day after day, asking to hear a favorite book over and over again, and drawing stacks of similar pictures. Puzzles, matching games, and peg boards are often popular. She beams with pride after mastering a challenging task!

Physical strength and coordination continue to grow. The three-year-old can be a **risk taker** whose confidence exceeds her competence. **Close supervision** is critical for ensuring safe active play. Throwing and kicking balls, pedaling tricycles, climbing and sliding are favorite playground pastimes. Small motor skills are growing, too. When using crayons, scribbles often give way to very deliberate marks, such as lines and circles. Soon, self-portraits and other drawings emerge.

The three-year-old is **eager to talk** about a wide range of topics and is often **full of questions**. Five and six word sentences are common during the middle and end of this year, and she continues to master the basic rules of grammar. Favorite books include repetitive text, and the child joins in with gusto during favorite parts. She often enjoys paging through familiar books, retelling the story aloud. She also **tells her own, unique stories**, beginning with very simple single sentence stories and progressing to longer, more complicated tales – "and then… and then… and then…"!

Learning together with three-year-olds

- Provide support as children begin working and playing with one another. They will continue to need your guidance throughout this year, and can learn much as you role model social behavior.

- Validate the feelings of the emotional three, and remember that events that seem small to you may be monumental to her! Celebrate her accomplishments, and help her seek solutions to problems.

- Offer a wide variety of materials to encourage sorting and classifying. The three-year-old enjoys exploring natural materials, such as seashells and stones.

- Create a library of favorite books, and share them often with individuals or small groups of children. Seek books with a repetitive story line, and encourage the child to join in telling the story.

- Play-dough and clay are popular with three-year-olds, as are finger paint and tempera paint. Encourage open-ended, process-oriented use of these materials.

- Offer an array of fine motor materials, such as puzzles, lacing and linking activities, and simple building toys. Sort and organize materials to help children be successful, and consider rotating materials to maintain interest.

- Create warm, cheerful rituals for daily tasks such as putting away toys, washing hands, and preparing for nap. Songs and games help smooth transitions while accommodating the three-year-old's desire for familiar routines.

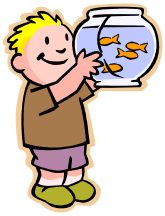
- Take time to listen to the three-year-old's stories, and to talk with her about her favorite topics. Encourage sequencing and recollection skills as you discuss events from the recent past, such as a cooking project from earlier in the day.

- Children are developing stronger interests, and are often interested in the same topic for hours, days, or even weeks. Consider allowing children's questions, ideas, and topics of play to guide classroom planning. For example, children who race to the playground fence in eager anticipation of the weekly arrival of the trash truck may delight sharing books about big vehicles, playing with toy trucks during block play, and having a chance to see community helper vehicles "up close and personal" through a field trip or special guest.

Fun-loving and Friendly Fours

Play with peers occupies much of the time at school, though the four-year-old may occasionally prefer to play alone. At this age, children are keenly aware of rules and seek organization and order; they often "tell on" others who are not following rules, and may seem bossy at times. "Best Friends" becomes an important topic of discussion. Strong, meaningful **bonds form between close friends**, with some children becoming almost inseparable. At the same time, the powerful threat of "I'm not your friend" is not uncommon, and can result in many hurt feelings. Slowly but surely, negotiation skills begin to fall into place. The four-year-old becomes more capable of solving conflicts with peers as the year progresses.

The four-year-old often revisits the **need for independence** that was prevalent as a toddler. This time around, he can do many more things on his own. Zipping and snapping skills emerge during this year, and some children will learn to tie shoes. The four-year-old thrives on the chance to **help with "grown-up" tasks** in the classroom, such as serving meals family style, caring for classroom pets, or helping clean up spills with a hand broom and dust pan. He may be equally willing to help out with simple tasks at home. The chance to make his own peanut-butter-and-jelly sandwich may be a slow and sticky process, but one that fills the four-year-old with pride!



Meaningful learning occurs primarily through play; this is a very busy age! The four-year-old **loves to experiment** with how things work, and will enjoy working with magnets, pulleys, pumps, ramps, and other "cause-and-effect" materials. With adult guidance and supervision, he can be very successful with "real" materials such as scissors and child-sized woodworking tools. **Pretend play** continues to be an important part of the day and is more complex and inventive now than at age three, reflecting television and movies, as well as community roles, such as firefighter, doctor, and chef. Teachers are often surprised to see their words and actions echoed precisely as children play school!

Outdoors, superhero play is common. Play with soccer balls, basketballs and almost every other sort of ball is also popular. On the playground, these games loosely emulate the sports played by older children, though inventive rules are prevalent, and the games often include aspects of pretend play. Gross motor skills involving **balance**, such as standing on one foot, walking up and down stairs easily, and crossing a low balance beam, fall into place during this year. At times, however, the four-year-old will appear clumsy, bumping into peers and tripping over furniture. Often, this clumsiness results not from a lack of coordination, but because the child is focused, visually, on objects at a distance, rather than close at hand.

Four is perhaps one of the most talkative ages of all! As the year progresses, the child will understand and use terms to describe complex concepts relating to time, position, and

distance. The four-year-old **loves new words**, and begins to use a wide array of adjectives to convey his meaning. Exaggeration is common. Silly rhymes, songs, and stories are very popular, and "bathroom talk" may emerge as a way of gaining attention and joking with peers. During this year, some children start to form the connection between spoken and written language. Children may begin to use inventive spelling as they write letters to friends, make signs for a building block city, or take orders at a pretend restaurant.

Learning together with four-year-olds

- Involve children in classroom tasks, such as serving meals, feeding pets, cleaning up messes, and creating displays of artwork. Foster a sense of community and shared responsibility.

- Provide opportunities for small groups of children to work together to complete a task.

- Incorporate real-life materials, such as envelopes, rubber stamps, and an old typewriter at a writing center; real pots, pans, and utensils for dramatic play; and simple tools for woodworking.

- Set the stage for children to carry out simple experiments, such as mixing colors; discovering items that sink or float; working with magnets, mirrors, magnifying glasses and other simple science tools; planting seeds and predicting/observing growth; or making shadows with a flashlight.

- Four-year-old children enjoy working with small objects. Nuts and bolts, buttons, seashells, and coins encourage sorting and classifying. (Supervise carefully to ensure that materials are not placed in mouths!)

- In addition to the ever-popular "housekeeping" props, offer dramatic play props to support new themes, such as veterinarian's office, fire station, grocery store, or train station.

- Provide materials to encourage emergent writing skills. Consider providing notepads, small clipboards or chalkboards, and/or dry erase boards throughout the classroom, along with crayons, pencils, chalk and markers. Children will use the materials in a many ways as they play.

- Create "zones" for different kinds of play outdoors. At this age, children's ball play takes up more space, as does active dramatic play. Tricycles, slides, and sandbox play continue to be popular, as well.

Fabulous Fives

Often a people pleaser, the five-year-old may ask permission to move from one activity to the next. The **need for approval** is strong; she often asks adults or peers to validate her work, with questions like, "Do you like my drawing?" Five-year-olds may also feel torn between the desire to please adults or to follow peers, and can challenge authority at times. Another quirk of this age: the five-year-old may be delightful at home but testy at school, or the other way around!

A shared sense of silliness creates close friendships; five-year-old children may find **humor** in "inside jokes" and often adore riddles, silly stories, and knock-knock jokes. At this age, children often **prefer to work or play with one or two friends** at a time, rather than with a larger group. Feelings are sometimes hurt when children feel excluded. At the same time, five-year-olds are becoming more sensitive to the needs and rights of others. **Acts of kindness** can be seen as she tries to help peers succeed and feel good. Sharing skills blossom during the five-year-old year, as long as the plan to share occurs prior to a serious conflict over a toy.

Children continue to thrive on **hands-on learning** throughout the pre-kindergarten and kindergarten years. Interest centers can provide concrete experiences while **fostering math, science, language, and fine motor skills. Children often** focus intently on their work at this age; scheduling long blocks of time to use materials encourage complex building block structures, creative pretend play, and highly detailed artwork. Five can be an age of perfectionism, and the child may create the same, or very similar, block structures or drawings day after day to ensure success. Rainbows and family portraits are popular subjects for drawings and paintings.

Writing skills continue to emerge and improve. Hand dominance is established in almost all children by age five. The young five-year-old focuses intently on writing, often gripping their pencil tightly and leaning over their work. She concentrates on each individual letter, and may tire easily. As the year progresses, children tend to write more quickly, but their work may become sloppy as quantity takes precedence over quality. Invented spelling is used frequently, often representing the beginning and ending sounds of words. The random nature of a preschooler's stories gives way to **more structured storytelling** with a distinct beginning, middle, and end.

The child is **less talkative** now that at four. She has the ability to give elaborate responses but may not do so, preferring instead to give one-word answers. You may, however, hear her talking to herself, especially when she "**thinks out loud**" to work through problems while using hands-on materials. During the five-year-old year, her vocabulary will grow to 13,000 words or greater. **Reading** emerges for some children, but will not fall into place for another year or two for others. Acquisition of reading skills is dependent on changes in communication between the eyes and brain, as well as many other factors. Learning to read early does not always

indicate that a child is gifted, just as late readers often go on to become avid and talented readers in the years to come.

The five-year-old continues to have **a strong need to move**. "Sit and Listen" times, such as circle time, are most successful if limited to periods of no more than 15 – 20 minutes. Outdoor play is a favorite part of the day! If allowed, five-year-olds will become deeply focused on digging in deep sand or constructing with large outdoor blocks, planks, or crates. Locomotor skills such as galloping and skipping fall into place if they have not already, and she may learn to jump rope during this year. Structured playground games, such as "Duck, Duck, Goose" and "Red Light, Green Light" may be popular, though many five-year-olds **do not handle competition well** and may react poorly to games where they lose or have to sit out.

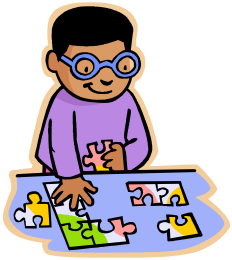
Learning together with five-year-olds

- Schedule long blocks of time for play with a wide variety of open-ended materials.
- Allow projects to continue over several days or weeks; offer a safe place for materials to be stored between uses.
- Offer space and safe materials for open-ended outdoor construction play.
- Provide books that appeal to children with a broad range of interests and abilities. Remember that "beginning reader" books often have a highly limited plot that many children find boring; well-written and illustrated picture books continue to be popular, and some children enjoy having more complex "chapter books" read aloud to them.
- Limit use of worksheets or workbooks as much as possible. Instead, offer concrete experiences such as cooking with simple recipes, measuring using real tools, and studying live plants and animals.
- Encourage children to explore, test, and articulate theories.
- Offer opportunities for children to work alone, with a partner, and in groups of three or four.
- Some five-year-olds enjoy the opportunity to teach a game or read a story to a younger child. Self-esteem can blossom when they share their skills with others.
- Share a variety of non-competitive outdoor games, but allow the option of free play, as well. Parachute games are popular with fives, as are music and movement activities.

Sweet and Silly Sixes

The six-year-old values independence and likes to make decisions, but relishes encouragement from adults. In the classroom, the six-year-old can be a charming, eager participant who thrives on classroom routines and rituals. At the same time, he is highly sensitive to criticism, and may burst into tears or withdraw from interactions if his feelings are hurt. At six, it is hard to admit mistakes!

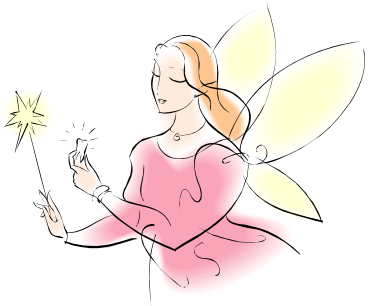
At play with peers, six-year-olds value rules and focus on fairness. Competitive activities are not ideal at this age; at six, damage is done if the child feels that friends or trusted adults think he is "no good" at something. He is becoming more understanding of differences in opinion, and much more adept at compromise than during the preschool years! Very much aware that he is a "big kid" now, the six-year-old may be highly protective of younger children, pets, and even insects!



In the classroom or afterschool environment, the six-year-old is a whirlwind of activity! Quantity of work far outweighs quality of work for most children, but the process of hands-on activities, such as painting, working with clay, or creating a group newspaper is very much enjoyed! Fine motor skills are also very strong now; lacing and tying usually fall into place, and small motor toys like Lego and jigsaw puzzles are popular. The six-year-old loves to work with cause-and-effect tools, such as eye droppers, air pumps, and rotary beaters.

The child views the world much more logically now, and is eager to seek answers to "why" questions. Meaningful learning can be fostered by encouraging children to observe carefully and seek answers to questions; this is an excellent age for direct experiences related to science and social studies. Recitation of factual information, such as months of year, address, and birth date comes much more easily now, without the confusion and frustration younger children often experience if adults try to promote rote memorization in the preschool setting.

Reading proficiency continues to strengthen for many children, though some children will continue to build pre-reading skills during this year, allowing for the emergence of strong reading skills in the following year. Many six-year-olds enjoy reading environmental print aloud while passing road signs and billboards in the car and during trips to grocery stores and restaurants. Expressive and receptive vocabulary will double in the next year or so. Imaginative stories involving magic and fantasy are favorites of the six-year-old, who whole-heartedly believes in the tooth fairy and her holiday friends! Jokes and riddles are also immensely popular.



Some teachers describe the six-year-old as being obsessed with teeth and, indeed, the loss of baby teeth and eruption of permanent teeth is a major life event for children! Many sixes often experience a renewed "teething" period where they gnaw pencils, erasers, and even books and toys. Physically, the six-year-old may still seem awkward or clumsy. He may become discouraged when playing with older children who seem, to him, to be faster and better at almost everything. Active play is an important and beloved daily outlet. Balls and jump ropes are favorite playground equipment, and games involving hideouts or clubhouses are increasingly popular as the year progresses. The six-year-old tires easily, and does best with a long block of outdoor play time that allows him to cycle through bursts of intense activity, followed by quieter moments of rest and recovery.

Learning Together with six-year-olds

- Offer kind words of encouragement often, but limit criticism as much as possible.
- Create meaningful classroom rituals, such as participatory morning meetings, sharing times, and inside jokes.
- Limit competition indoors and out, focusing instead on cooperative games and activities.
- Encourage children to seek answers to questions that interest them, such as "What makes a river run?" and "How do tadpoles turn into frogs?" Offer hands-on experiences in response to children's questions when possible.
- Continue to offer blocks and dramatic play materials, including puppets, dress up clothes, props, and dollhouses.
- Schedule field trips and guest speakers to provide direct experiences for learning.
- Consider allowing the six-year-old to teach a game or read a story to a younger child, fostering a sense of competence and allowing him to explore his nurturing nature.
- Create a print-rich environment.
- Encourage children to join to big projects, such as murals, class newsletters, and cardboard box constructions.
- When possible, limit plastic materials, offering materials made of metal, wood, and cloth instead. Real materials appeal to the senses and naturally spark more careful, focused work and play.

Skillful Sevens

Seven can be a dramatic age! From the child's perspective, everything is wonderful in the world, or everything is terrible; seemingly small events can color the child's day! She generally prefers the company of peers to adults, and has several very close friends. The seven-year-old is highly concerned with concepts of right and wrong; "tattling" may surface or resurface during this year in correlation with her desire to ensure that everyone follows the rules and everything is "fair".

At seven, children can be highly competitive, with a strong desire to be "perfect" and "best". Concerns about popularity may emerge during this year. She may imitate the words and actions of peers as she experiments with various roles. Parents may be surprised when new behaviors are tried for the first time at home! When playing with peers, the seven-year-old retains some of the self-critical tendencies that she had at age six, but is now better equipped to handle winning and losing without cheating or becoming upset.

The seven-year old continues to enjoy dramatic play, and will use real props to craft complex pretend play scenarios. Restaurant, office, and school are popular pretend play themes. Logical reasoning continues to emerge, and she experiences strong feelings of satisfaction when she can solve problems and figure out puzzles; meaningful conclusions can be drawn from simple science experiments. The ideal classroom/group setting provides a balance of active and quiet pursuits, including chances to work with groups of peers, a partner, and alone. Large-scale, child-directed projects create momentous learning opportunities for the seven-year-old!

Reading fluency and writing proficiency continue to grow during this year. Many children, however, seem to feel "burned out" on typical reading assignments and paper and pencil tasks. Schoolwork and homework may become a struggle. Perhaps one of the best ways to hone skills at this age is to inspire children to use reading and writing in fresh, new ways, such as contributing to a web page or PowerPoint slide show, producing a script for a puppet show, conducting a simple interview, or creating and using recipes. During the out-of-school hours, it is ideal to offer choices, allowing the child to rest or relax, socialize with friends, or enjoy age-appropriate games and toys.

Physical hobbies are common during this year; children often pursue interests such gymnastics, skating, soccer, and bike riding. Fun, low-key lessons may help build skills, but it is important, too, for adults to remember that "dabbling" in a wide variety of activities can create a healthy, life-long love of exercise that may not be accomplished through intense, focused training in any given sport. Long blocks of free play outdoors offer the seven-year-old freedom to roam, explore, and move.

Learning together with seven-year-olds

- Create fun and meaningful group rituals to foster a sense of belonging.
- Encourage children to talk through and solve problems, but provide supervision and support to prevent deliberately unkind behavior towards peers.
- Board games and card games are popular. Foster creativity by allowing children to build structures with playing cards and invent their own rules and variations for games.
- The seven-year-olds' strong sense of fairness and justice makes this a great age to incorporate community service projects, such as collecting food and supplies for a pet shelter.
- Talent shows and karaoke are popular, and are often enjoyed most when done just for fun, rather than to determine a winner.
- Offer simple experiments to explore properties of magnets, air, water, etc.
- Cooking experiences are greatly enjoyed, and children are able to participate in a variety of ways. Consider preparing and eating real foods, or concocting your own bubble solution, play dough, or slimy putty!
- Offer outlets for drawing and creative writing, but avoid mandatory paper and pencil tasks if at all possible.
- Ensure that classroom materials are in good repair. Frustration, boredom, and lack of focus can prevail if the art supplies are dried out, the books are torn and tattered, and the puzzles are missing pieces!
- Gardening can be highly rewarding at this age. Children can fully understand the process and marvel at the transformation from seed to plant. Similarly, consider creating a classroom nature center that allows children to observe the metamorphosis of caterpillars or tadpoles, or to incubate and hatch eggs.
- Encourage children to hone skills through the use of real tools for measuring, constructing, and creating. Woodworking and work with clay provide many valuable experiences.
- Provide long blocks of free choice time that allow for active play and quiet contemplation.

Magnificent Middle Years: 8, 9, and 10

Eight, nine, and ten year olds are developing strong connections with adults outside the home. Teachers, coaches, and other trusted grown-ups have a tremendous influence as mentors and role models. One-on-one conversations with adults allow the child to feel competent, capable, and valued. She is often helpful and cheerful in the classroom, but may become sullen if she feels ignored.

Free play often finds children polarized by gender; boys tend to play with other boys while girls tend to play with other girls, and the groups may avoid or antagonize one another. At this age, children are easily embarrassed and may seek to conform to a group rather than risk standing out by voicing a differing opinion. In addition, children become increasingly self-conscious about their talents and weaknesses, sometimes avoiding activities like dancing, singing, or drawing if they do not feel as competent as peers.

This group demonstrates a greatly increased attention span and can be thoughtful and reflective. In the classroom, "busy work" and worksheets may meet with great resistance. On the other hand, teachers find that projects that encourage reasoning and appeal to the child's idealistic nature are well received and often result in excellent educational outcomes. Interest-based activities are popular with the eight-year-old, and she can now embrace hobbies such as photography, origami, and weaving with more success than in the younger years. Clubs are very popular, fostering a sense of belonging and allowing children to explore shared interests. Children also rally behind group efforts such as bake sales, lemonade stands, and coin drives. Not only do these activities provide a common goal, but they also appeal to the "middler's" fascination with money!

At eight, nine, and ten children can spend long stretches of time engaged in planning and building activities. Materials such as Lego, K'nex, and Erector sets can fascinate the eight-year-old for hours. She also enjoys using tools to take apart real electronics, such as no-longer-working radios, alarm clocks, and telephones. Board games continue to be popular, and the simple games of the early elementary years are slowly replaced with more complex games, such as Clue, Monopoly, Chess, and Blokus. The 8-10 year old appreciates having a system and space to save Lego constructions and half-finished boards games and jigsaw puzzles to return to later.

Outdoors, she thrives when given the choice to join in group games or sports, explore climbers and swings with friends, or just "hang out". Children are growing rapidly during this year, and often seem restless and "wiggly". In addition to outside time, she enjoys frequent opportunities to move throughout the day. Possibilities include active games, such as "Simon Says", during transition times; opportunities to walk around, stand, sit, or stretch out on a soft rug in the indoor environment; and even materials that can allow limited gross motor play in the classroom, such as a hopscotch mat or Nerf basketball hoop.

Learning Together with Eight-, Nine-, and Ten-Year-Olds

- Take time to talk with children about their thoughts, ideas, and interests.

- Offer a wide variety of choices and select activities that are open-ended and do not lead children to judge their efforts as "good" or "bad" in comparison to others.

- Use stories, role play, and discussion to encourage children to care for one another and "do the right thing".

- Offer materials and guidance to encourage children to explore new interests. Possibilities include children's animation software, microscopes, musical instruments, and materials for making jewelry. Consider offering clubs to allow children with similar interests to work together.

- Invite guests to share topics of interest with the children. Visitors such as park rangers, athletes, musicians, and artists can spark new interests, provide hands-on experiences to support learning, and offer meaningful interactions with adults.

- Provide a wide variety of appealing, age-appropriate materials for construction, as well as puzzles and board games.

- Eight-year-olds are likely to be offended by materials designed for younger children, such as Duplos or beginning reader books. Avoid materials that will lead children to believe that they are too old for the provided activities.

- Avoid mandatory writing projects in afterschool and out-of-school environments, but encourage children to explore the many purposes that writing can serve. They may enjoy scripting a play, writing and illustrating books for younger children, creating secret codes, or writing letters to pen pals.

- Value children as competent and capable learners, and offer materials and experiences in response to their interests. An enthusiastically motivated group of middlers can accomplish almost anything!

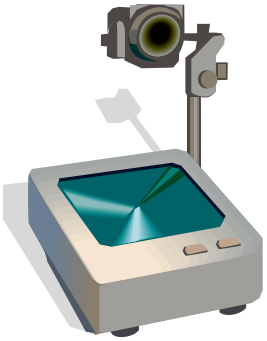
Better Together!

Everyday materials can ignite learning when paired together in new ways!

- **Popsicle sticks with play dough or modeling clay**
  As children explore, they may poke sticks into a large ball of clay, or use small pieces of clay to adhere the sticks to one another as they build first flat designs, and, eventually, three-dimensional creations.

- **Cardboard packing tubes with balls and/or toy cars**
  Children will discover properties of tunnels. What happens if you stand a tube on end and drop in a ball? What happens if you place a tube sideways on the floor? What changes when you prop one end of the tube on a stack of blocks or books?

- **Small objects or paper cut-outs with an overhead projector**
  Shine an overhead projector on a blank wall, or hang a sheet to create a blank surface.



  With adult supervision, encourage children to experiment with placing different objects on the projector surface. How does placement of the objects change the shadows that are projected? Children may want to make construction paper cut-outs to place on the projector. If you write your name on a scrap of paper and place the paper on the projector, will you see your name projected on the wall? How could you successfully project your name on the wall? Some children may enjoy taping large sheets of paper to the wall to trace the shadows they project, and then painting the shapes at the easel.

- **PVC pipe & joints with water**
  This activity can be successful in the classroom, but may be even more fun outside on a warm day. Create a large workspace with room to build, as well as a shallow tub of water and tools to scoop and pour the water. Children will discover properties of water and learn about gravity as they experiment with pouring the water through their PVC creations!

Learning Together Throughout the Day

I have learned that the more you communicate with children while they are engaged in different activities or centers, the more they will express themselves.

Francella Grigsby
Pine Bluff

Learning Together Throughout the Day

As we move through the day, children are learning and so are we. The following pages describe an environment in which every part of the day is valued as part of the learning experience.

In some traditional settings, "teaching times" are specific parts of the day when teachers present academic concepts to children. Examples of teaching time include circle time or table work time. These times are differentiated from play times, meal times, and other scheduled events. Non-academic activities are often viewed as less meaningful than the teaching times, and are sometimes relegated to a teaching assistant, while the teacher tends to paperwork or prepares for later activities.

In a program where children and adults learn together, however, every moment of every day is recognized as having the potential for "teachable moments". Adults share tasks equally, and are attentive to children's thoughts and ideas throughout the day. They realize that children's interactions with their environment—at work, at play, and during routines—allow them to explore and grasp concepts that are relevant to them.

In this setting, teachers work to optimize learning opportunities throughout the day.

Indoor Learning Center Time

Schedule

Large blocks of play time to allow children to become engrossed in their play. The adults watch for indicators that children are becoming bored, and are prepared to provide new play activities as needed to help maintain their interest.

Materials

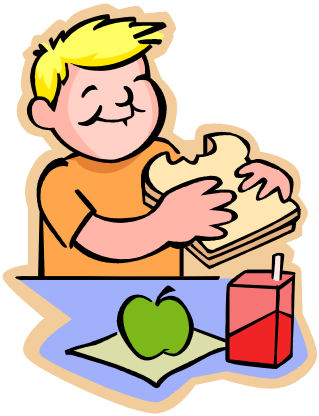
A wide variety of materials are provided in well-organized learning centers. The centers encourage children to actively explore language, art, math, science, music, dramatic play, block building, sand/water play, and other interests. The room is carefully arranged to avoid crowding, and to provide appropriate work spaces for use of materials, such as a child-sized table near a shelf of art supplies and a soft rug for working floor puzzles. The arrangement of the room and the placement of the materials help prevent conflicts and guide children to use materials properly. Adults help children learn to use materials independently, and are attentive to children's needs during play.

Action

Adults join children as they play, asking questions and encouraging children to talk about what they're doing. Children are free to use materials creatively, and are allowed to take materials from one learning center to another to serve a purpose. For example, children might use blocks to build a stable for a stuffed horse that they found in the library area, or they might use art materials to create tickets for a pretend train ride in the dramatic play center. Adults provide new materials or suggestions when children need help sustaining or re-focusing their play. Older children are helped to find the space they need to continue their work over the course of several days, or even weeks.

Meal Times

When possible, children are encouraged to help prepare the food, set the table, serve the meal, and help with spills. Adults recognize that, in addition to developing autonomy, these activities offer many opportunities for children to apply math skills.



During meals, adults sit and talk with children, setting the tone for a relaxed and pleasant experience. Adults avoid questions such as, "What color is your corn?" and "How many chicken nuggets do you have?" Instead, adults have meaningful conversations with children. Conversation topics range from favorite foods to recent events, to plans for the upcoming weekend. Children are encouraged to socialize with their friends.

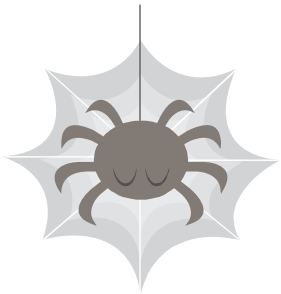
Children are allowed to eat at their own pace, and activities are provided to engage children as they finish eating.

Routines and Transitions

Routines, such as toileting/diapering and washing hands, take place individually whenever possible. Children spend little, if any, time waiting for their turns. Adults make the best of unavoidable waiting times by singing, playing games, and having conversations with children.

Routines are not hurried. Care routines, such as diapering, are valued as a time to enjoy important one-on-one interactions with children.

As the children move from place to place within the facility, they are not expected to walk silently. Instead, children are allowed to talk about what they see around them. Adults are in tune with children's interests, and may stop mid-trip to watch a spider spinning a web near the playground, or to discuss a display of older children's artwork in the hallway.



Group Times

Adults realize that group activities, such as circle times or whole group story times, are not ideal for some children. As a result, these activities may be eliminated from the daily schedule, replaced with small group and individual activities. In general, the younger the child, the less effective group time will be.

If group times are a part of the daily schedule, adults plan experiences that truly appeal to children. Alternative activities are provided for children not wishing to participate. Group times are busy, talkative times as children are encouraged to move, discuss, and use materials. Children are not expected to sit quietly and listen. If the children appear restless or disengaged, adults recognize this as a cue that it is time to move on to a different activity.

Outdoor Play Times

Outdoor time is recognized as a valuable part of the day. Children are dressed appropriately to go outside in almost any weather, if only for a short period of time. On beautiful days, outdoor time is extended to allow long, leisurely explorations by children and adults.

The outdoor play area provides space and materials for a wide variety of gross motor activities. Children are encouraged to run, shout, and play freely. The area is designed to allow children to access and use materials safely. For example, the tricycle area is separated from the ball play area, and toys, such as trucks and buckets, are not taken on the climbers. Adults join with children, modeling healthy, active play. Adults provide materials or resources in response to the children's interests. Children are encouraged to wonder and explore as they build a bridge across the sandbox, make a rainbow with a garden hose, or blow bubbles on a windy day.

The adults call children's attention to the natural environment. This is the perfect time to talk about the clouds, look for birds, or explore puddles! Adults help children discover seasonal changes, such as autumn leaves on the ground, tiny icicles on the fence, or the first dandelions of spring. If possible, the play area includes natural elements, such as grass to run on, trees to sit under, small hills to climb up and roll down, a garden area to care for, and bird feeders or a rabbit hutch.

Keeping It Real

Working and playing with objects from real life allow children to experience a broad range of textures and materials. As children play, they learn how wood differs from plastic or metal, and how various types of fabrics look, act, and feel different from one another. Working with real materials, in addition to traditional toys, allows children to feel more mature and competent in their play, and they quickly learn that certain materials are more fragile than others, and must be handled with care. In addition, many real materials are inexpensive and easy to collect at home, outdoors, or at a thrift shop.

50 real-life materials for use with children of all ages

1. Baskets and trays made of natural materials
2. Butter knives
3. Cardboard appliance cartons
4. Cardboard packing tubes
5. Carpet pieces
6. Clean, empty food containers
7. Cloth napkins, placemats
8. Coffee cans
9. Cookie sheets
10. Craft store “fur”
11. Fabric scraps
12. Flashlight
13. Funnels
14. Gift wrap remnants
15. Hand brooms, dustpans
16. Hand-me-down clothes (men’s & women’s)
17. Hat boxes
18. House painting brushes
19. Ice cube tongs
20. Ice cube trays
21. Laundry detergent scoops/measuring caps
22. Margarine tubs
23. Measuring cups
24. Mirrors (unbreakable)
25. Muffin tins
26. Musical instruments
27. Oatmeal canisters
28. Old fashioned alarm clock
29. Paper towel tubes
30. Photo albums
31. Photo albums
32. Pinecones
33. Pots and Pans
34. Preemie diapers for dolls
35. Purses and wallets
36. PVC pipe
37. Rolling pin
38. Rotary egg beaters
39. Sand
40. Scarves
41. Seashells (larger shells only for little children)
42. Shoeboxes
43. Spray bottles
44. Take-out menus from restaurants
45. Telephones
46. Tree cookies (smooth, flat cross-sections cut from a tree trunk/branch)
47. Wallpaper sample books
48. Wind chimes
49. Window birdfeeder
50. Wooden massage tools

Learning with Children

I learned it is fun to paint with different parts of our bodies (even if the teacher is freaking out about the paint all over the arms, hair, etc.).

Rita Neve
Booneville

Children and Teachers Learning Together

How come some things stick to a magnet, while others do not?

What happens if you swirl a glob of red paint together with a glob of blue?

How can we build a tall block tower that won't topple over?

As adults, we have many years of acquired knowledge and life experiences that allow us to answer these questions effortlessly. In fact, we know so much that our children often believe we have *all* the answers! Unlike us, children have had only a few short years of life experience, and there are many things they have not yet discovered. One of the joys of teaching is discovering and re-discovering the world with the children.

How do children learn? Some people describe children as little sponges, just waiting to soak up the knowledge that we give them. Others see children as blank slates, ready to be filled with information. These views suggest that children come to us empty, with no thoughts, ideas, or knowledge. Spend a few minutes in conversation with a three-year-old child, and you'll realize that this simply cannot be true! Children come to us with past experiences and theories of their own, and they are ready to share their perceptions. They rarely respond eagerly to being told what they are to learn at a given moment, but will participate enthusiastically in any activity that sparks their interest.

In addition, we know that children learn best through direct experience and experimentation, not by being told or shown. Children at play are actively learning about the world around them. They are testing their ideas and making discoveries through trial and error. Brain research suggests that this kind of experiential learning is essential for optimal development. A child who is told how objects move differently uphill and downhill will soon forget; a child who experiments by rolling balls up and down a ramp will remember!

When adults and children learn together, adults do not attempt to direct and control children's learning. They don't tell children what and how to learn. Teachers do not approach each day with an agenda of academic tasks to be accomplished, and they do not view teaching as something that adults do "to" children. Instead, when adults and children learn together, adults work to create an environment that supports learning. Using their knowledge of child development, they fill the classroom with materials that invite children to experiment and explore. Adults recognize "teachable moments" and encourage children to wonder, reason, and explain their ideas. New materials and activities are provided in response to children's interests. The learning environment is an ever-changing, active place.

When children are seen as competent and capable, the adults do not dictate the direction of the play. Teachers join children as they work and play, allowing the children to lead when possible. They understand that children's play is meaningful, and, through careful observation, seek to understand the purpose behind each child's exploration. Rather than telling the children that red and blue make purple, the teacher offers cups of primary-colored paint at the easel, allowing children the joy of making this discovery on their own. Adults are in tune with children's changing social, emotional, and cognitive needs, and use these insights as inspiration for planning the next experiences.

When children and adults learn together, teachers may find that they view their role in the classroom in a new way!

Consider this… *(Teacher & child-directed classroom)*	**Instead of this…** *(Classroom directed by teacher alone)*
Teachers are actively involved with children throughout the day.	Teachers often stand back during play times, stepping in to correct children when needed.
Children are viewed as competent explorers, building understanding through experiences while learning through trial and error.	Children's ideas are often thought to be "wrong", and in need of adult correction.
Children's thoughts, ideas, and existing knowledge are valued.	Children are viewed as empty vessels, to be filled up with knowledge by an adult.
Children's play is considered meaningful and purpose-driven.	Children's play is considered cute and trivial.
Playtime is viewed as the best time for learning. During play, children may be *invited* to join special activities requiring adult input, such as a cooking project.	Playtime is differentiated from teaching and learning time. Children may be called away from play to join in teacher-directed learning activities.
Teacher's planning may begin with a predetermined theme or unit, but flexibility allows children's interests to spark a change in plans or launch a new theme.	Teacher's planning follows a predetermined list of themes or units. Pre-planned activities are followed closely and completed according to schedule.
Rewards and threats are seldom used. Teachers strive to create an environment and schedule that accommodate children's natural learning styles. Whole group times are limited, with alternative activities available.	Rewards, such as sticker charts, treasure box toys, popcorn parties, or marble jars are often used to encourage behavior during mandatory whole group times, such as walking in line, circle times, and story times.
Classroom activities are meaningful to children. Teachers serve as advocates for developmentally appropriate experiences.	Classroom activities are planned to keep children busy, to create cute displays, to introduce isolated academic skills, and/or to please parents or administrators.

Selecting Topics for Learning

If we want to learn together with children, it is essential to select topics that are meaningful and appealing to them. Rather than following a prescribed list of themes or "doing the Penguin Unit because I *always* do the Penguin Unit in January", take time to assess what sparks the children's interest. What are children curious about? You can use the following points to help determine what might be interesting to your group of children.

- What themes are represented in their play?
- What do they talk about during conversations with you, and with one another?
- What topics of interest do you see in children's artwork?
- What materials or events in or around the classroom seem to draw children's attention?
- Ask children to share theme ideas, too!

When you begin to narrow your list of possible topics, consider the following points.

- Does this topic appeal to many of the children?
- Does this topic provide many interesting facets to explore? (For example, a topic on bears is somewhat limited, while a forest life topic is broad, allowing for many different avenues of exploration.)
- Can I provide hands-on, direct experiences related to this topic?
- Have the children had prior experiences with this topic? Is it part of their immediate world? Is the topic real to the children?

Rather than following a rigid time line for a topic, allow children time to continue their explorations as long as the topic holds their interest.

- Avoid rushing. Remember that children learn through repetition, and may want to revisit favorite books, games, experiments, and activities over and over again. Children need plenty of time to dig into the topic and satisfy their curiosity.
- When children appear to lose interest in a topic or their level of engagement decreases, add new materials or provide new experiences to refocus or redirect the current topic. For example, when interest in a study of the kitchen begins to fade, try adding some new cooking utensils to the dramatic play center or taking a field trip to the bakery.
- Look for signs that children's interests are shifting to a new topic, and plan accordingly.
- One topic may morph into another. For example, a theme on restaurants may evolve into a theme on delivery trucks, if that is what sparks the children' interest.

In an environment where children's interests are allowed to guide learning experiences, there may not be a predetermined list of topics units, or themes. In can be helpful, however, to consider topics that are likely to interest children during the course of a year. This allows teachers to choose wisely when purchasing books and materials.

What have you learned with children?
I learned it takes time to follow my wonderful lesson plan; it takes less time to be joyful and spontaneous and go with what the children are interested in. -- Rita Neve, Booneville

Here are some things to consider when seeking topics that may be especially relevant to your group of children. Use these suggestions to begin your brainstorming.

What is going on in children's lives?

- New babies
- Weddings
- Vacations/camping trips
- New pets
- A broken arm, new eyeglasses, or similar medical experience
- Fascination with familiar places, such as grocery stores and restaurants
- Wondering about kindergarten at the end of the pre-K year.

What might spark children's interest in and around your building?

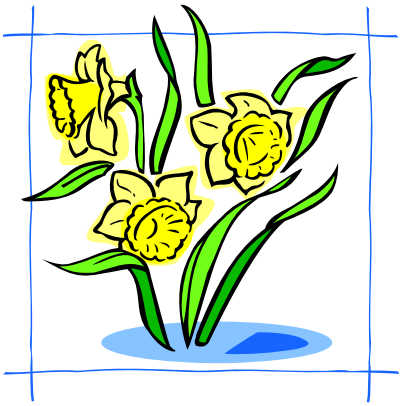
- New playground equipment
- An on-site garden
- A teacher's travels, new baby, or other exciting news
- The program's kitchen or office
- Nearby construction
- Trash trucks, utility vehicles, or other big machines
- A neighboring farm, fire station, or other appealing location
- Different wall surfaces—brick, plaster, cement, wood paneling, tile
- Empty boxes or packing crates

What will be happening in the community?

- County fair
- Agricultural event, such as cotton harvest
- Construction of a new bridge or tunnel
- Community festival or celebration
- A parade
- A rodeo

What is going on in the natural world nearby?

- Leaves change colors and fall during Autumn
- Autumn days grow shorter, prompting interest in day and night
- Nesting birds or busy squirrels
- First snow and ice of winter
- Windy weather or heavy rain
- Emerging insects in spring
- Colorful flowers blooming on a dreary late winter/early spring day
- Puddles or ants on the playground



Young Toddlers: The Mirror Discovery

A true story of children and their teacher in an Arkansas early childhood program.

In the dramatic play center of Sandy's young toddler room, an unbreakable mirror was mounted low on the wall, near the floor. As Sandy observed her children at play, she noticed that they spent a great deal of time in front of the mirror.

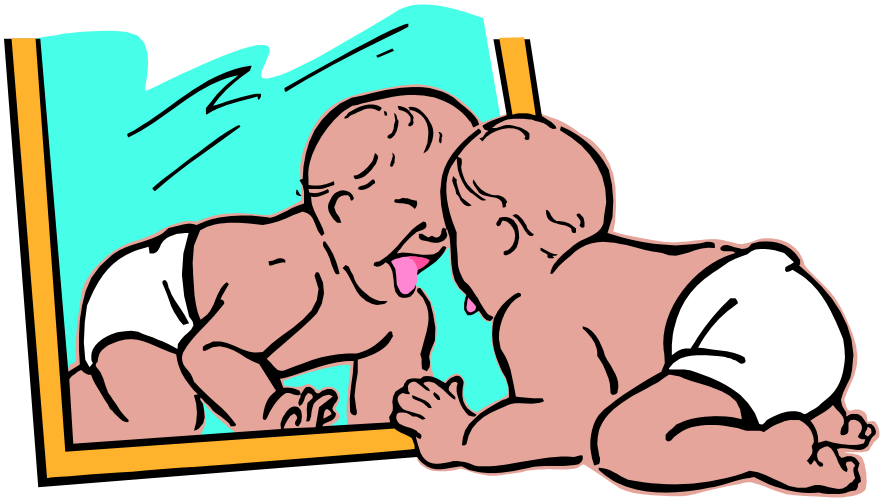
- Giovanni lay on his belly in front of the mirror, raising his head up to view his reflection before ducking down again to "hide" – he appeared to be playing peek-a-boo with himself!

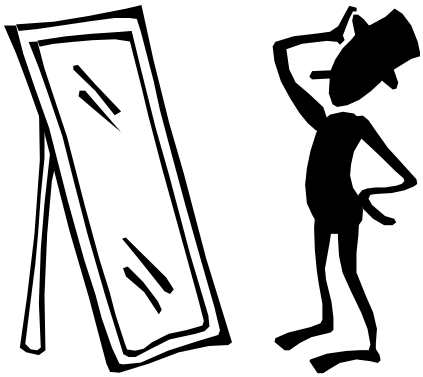
- Sarah Beth repeatedly pushed a toy truck towards the mirror and away again, watching the changing reflection intently.

- Marcus placed a flowery purple hat on his head and scooted across the floor to look in the mirror, laughing loudly when he saw his reflection.

- Hunter shone a small flashlight at the mirror, murmuring, "Oh, bright!" Captivated, he moved the flashlight in sweeping motions from side to side and up and down.

- Loris leaned very close to the mirror, smiling at her reflection and slapping at the mirror with her hands. She stuck out her tongue and observed it in the mirror. Leaning even closer still, she tentatively touched her tongue to the mirror's surface.





As Sandy reflected on her children's many uses of the mirror, she realized that they were not just looking at themselves—they were experimenting. The mirror allowed the children to study themselves and the impact of their actions on objects around them. Realizing the importance of the mirror to the children, Sandy began to wish that she had more mirrors in the classroom.

A few days later, at a birthday party for a family friend, Sandy noticed school-age children laughing at their reflections on the back of shiny, silver birthday balloons. The balloons were being used as a mirror! That afternoon, Sandy purchased un-inflated Mylar balloons at a nearby dollar store. She wondered if there might be a way to transform the balloons into toddler-safe mirrors. Sandy cut squares from sturdy cardboard and used a coating of glue to securely cover one side of each square with Mylar.

When dry, she placed the homemade mirrors in a basket in her classroom. As children discovered the mirrors, they began to experiment in new ways.

- Anna lies on her back, holding a mirror above her and singing to herself in the mirror.

- Sarah Beth stands on a mirror, staring down at her reflection.
- Marcus places a mirror on the floor and carefully arranges pieces of plastic play food on the mirror. When the mirror is filled, he clears it and begins to fill it again.

- Isabel places two mirrors perpendicular to one another in a corner of the room. After placing a stuffed rabbit in front of the mirrors, she exclaims, "More bunnies!

- Giovanni carries a mirror around the room with him, holding it out to view the reflection of many different objects in the room.

Sandy's careful observations of her children's behavior and creative problem-solving allowed her to set the stage for unique and meaningful learning experiences!

Preschool: The Bridge Exploration

A true story of children and their teacher in an Arkansas early childhood program.

During center time, Justin, a preschool teacher, observes a group of children racing Hot Wheels cars in the block center. Soon one of the children discovers that a ramp can be created by propping a long block against a shelf. The children begin to call this their race track, launching cars down the ramp and across the floor. The play is interrupted when the block ramp is bumped and falls to the floor with a loud crash, but the children quickly rebuild and continue their play.

The next day, Justin introduces a set of orange plastic Hot Wheels track to the block center. The set is non-motorized, and provides a plastic clip to attach the track to a shelf top, creating two long ramps. Justin remembers playing with a similar set as a child, and hopes that it will allow the children to continue their exploration with the toy cars. The children are enthusiastic about the track, and soon learn to assemble it independently.

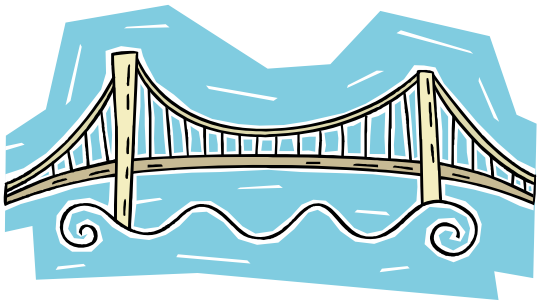
For several days, "racing cars" consumes much of the children's focus. Their play changes gradually as they

- construct a block wall at the end of the track to prevent cars from getting lost,
- add a tunnel made of paper towel tubes,
- add a line of plastic people along the shelf top to serve as spectators,
- experiment with stacking blocks to add hills to their track.

On Friday, one of the children suggests that they attempt to stretch the track from one shelf to another, off the ground, to create a "sky track". The other children join him in this attempt, and the track is built, spanning the block area. The children are disappointed to discover that the weight of cars on the track causes it to separate in the middle and fall. Again and again they rebuild and attempt to roll cars across, but the track breaks each time. The teacher asks, "I wonder how we could keep it from breaking?" When one of the children suggests that they use tape to fix the track, Justin agrees that this could be a good solution. Soon, the track is covered in tape. It certainly looks strong!

When they finish working, the children again try to roll a car across their track. This time, the wads of sticky tape prevent the car from rolling. Seeing the flaw in their design, the children un-tape the track and begin again, this time taping only the bottom of the track. Cheers fill the block area when the first car rolls across the track. A child watching the car roll exclaims, "It's not a track—we made a bridge!" The children are excited about this idea, and eager to show their creation to others.

At the end of the day, Justin allows the children to leave their bridge up to return to the next day. Soon more and more bridges spring up in the block area. When the supply of track is exhausted, children begin to bring Hot Wheels tracks from home. Sensing the children's excitement, Justin hangs pictures of famous bridges on the wall in the block area, and provides a coffee table book of covered bridges from the library.



The children continue to modify their bridge system, adding construction paper tunnels, and using scarves from the music center to create a pretend lake beneath the bridges. Justin takes photographs of the bridges every day, and creates a poster showing the children's work. He arranges a field trip to a large bridge nearby. After crossing the bridge in their van, the group meets with a park ranger who shows them photos of the construction of the bridge and leads them to an overlook where they can see the dam at work beneath the bridge.

Many months later, long after the Hot Wheels track has been packed away, the children continue to talk about their bridges!

Kindergarten: The Tree Discovery

A true story of children and their teacher in an Arkansas early childhood program.

After a wild and windy spring night, the kindergarten children and teachers arrived at school to discover that a large tree on the playground had been blown down. After breakfast, the class put on their coats and headed outside to examine the tree. Never before had the children had such a close-up view of the branches and roots of a tree. They explored intently, asking questions and talking with one another about their observations.

Where the tree stood the day before, there was now a hole in the ground; worms, spiders, and insects were discovered. A child wondered aloud if they had always lived there, beneath the tree, or if they "just moved in" after the tree fell. Near the hole, the root system of the tree spread out like the points of a star. Children tentatively touched the soil-caked roots, noticing how flexible they were. A child noted, "I didn't know that there were branches on both ends of the tree—up in the sky and down in the ground!" A classmate responded, "I don't think they're branches, 'cause branches have leaves." Soon, a third child joined the conversation, suggesting, "Maybe the bugs ate the leaves off the under-the-ground branches."

A child discovered that he could straddle the trunk of the tree as if riding a horse, and soon the entire class joined him. Observations were shared about how the tree trunk was widest at the bottom, near the roots, growing narrow as it neared the branches of the tree. "I wonder why?" asked the teacher.

Seeking the answer to this question, a little girl ran across the playground to peer up at still-standing trees. After examining several trees, she reported back, "They're all like that! I think it's like blocks—if they were bigger on the top and not on the bottom, they'd fall over." Then, quietly, she asked, "But then how come this one fell over? It's built right."

The branches of the tree were examined closely, as well, and the children climbed carefully through the wild tangle of limbs and leaves. Broken branches were inspected closely. When a child excitedly shared, "Hey! There's wood inside here!" classmates gathered round to see. Knots, where limbs had fallen during storms past, were studied and wondered about. Several children worked together to collect the stray leaves scattered around the tree. The group remained at the tree, engrossed in discovery, for almost an hour.

What have you learned with children?
In finding answers to their questions, I've learned so much about science, nature, families, babies, and a wealth of other things. – Rita Neve, Booneville

Finally, the teacher called for the children return to their classroom. The tree was not forgotten, though. Throughout the morning, it served as a focal point for much of the children's play. Block trees were built and felled, and paintings at the easel reflected both the tree and the previous night's storm. Building on the children's interests, the teacher pulled related books to share, and helped the children create a display of leaves, bark, and other collected items in the nature area.

The group returned to the tree over the days to come. Clipboards carried paper and pencils to sketch the tree, and bug boxes were taken to collect creatures from the hole where the roots had been. Magnifying glasses were used for up-close study, and binoculars were employed to make comparisons to still-standing trees. Digital photographs were snapped, printed, and compiled into a book for the classroom. As children's interest in their tree continued, an unexpected study of botany was launched.

The Tree Discovery: What Happened Next

The kindergarten teacher recognized that the children were drawn to learning about their tree. She acted immediately to invite discovery and provide materials that she had on hand (several books, as well as paints in shades of green and brown) in response to their interest. In order to make this exploration as meaningful to children as possible, she then brainstormed a broad list of ideas that might relate to the topic. Here's part of her initial list.

Roots
Trunk
Branches
Leaves
Twigs
Bark
Birds
Insects

Squirrels
Holes
Nests
Pinecones
Acorns
Height
Growth
Planting

Dirt
Saplings
How/why tree fell
Rings
Knots
Lichen (on trunk)
Live/dead leaves
Decomposition

Forest
Wood/tree products
Tree farms
Types of trees
Other plants

Next, the teacher brainstormed a list of materials that might be added to centers to support the children's investigation of the tree.

Library Center: Books about trees, including an illustrated field guide to trees, *Ansel Adams: Trees*, *Sky Tree,* and *The Giving Tree*; owl, songbird, and squirrel puppets; a photo album of the children's own tree; books about stormy weather, relating to the fall of the tree.

Science Center: Natural materials (bark, leaves, and twigs) gathered from the children's tree; a basket of pinecones of various types and sizes; a basket of tree nuts in shells; bug boxes with insects gathered at the children's tree; an abandoned bird nest; a collection of seeds; a small, living tree; a real tree stump; tree life cycle puzzle

Sand Table: Twigs, small stones, plastic insects

Block Building Area: Tree blocks; small, plastic forest animals

Dramatic Play Area: Cameras, picnic prop box, dollhouse-like tree house set

Music Center: Wooden instruments and rain stick; shaker bottles with acorns; sheer, green fabric for use as a dance prop; sturdy, closed pinecones to use as rasps; CD of forest sounds; CD of thunderstorm sounds

Art Area: Leaves and twigs for use with collage or paint, or for making imprints in clay; paper and paints in natural colors; wood and wood glue

Math Area: Acorns with a bucket balance scale; leaf cards for patterning and sorting; plastic insect set for counting and sorting; Hi-Ho Cherry-O game; "tree cookies" (thinly sliced cross-sections from tree trunks/branches) to sort by size and count rings

As the tree study continued, the teacher carefully observed the children's play, adding different materials and suggesting new uses for existing materials in response to their interests. Children's ideas were valued as the teacher encouraged them to explore and discover.

When kindergartener Sarah suggested the use of pine cones in the water table, the teacher supported her. Soon, a new discovery was made—Sarah noticed that the pine cones closed up tightly when placed in water, but opened again as they dried. The teacher encouraged the children to speculate about why this happened, and recorded their responses on paper. The pine cones remained at the water table, and children repeated "Sarah's experiment" for weeks to come.

In addition to preparing the environment with materials related to the children's curiosity about the tree, the teacher planned activities to build on the children's current knowledge.

- A forest ranger visited the classroom to talk about the important role that trees play in the environment.
- The class took a nature walk near their classroom, noting the different kinds of trees growing there. Later, they created a book of photos from of their walk.
- Children worked together to create a large tree mural in their classroom.
- Families were encouraged to bring leaves from home for a classroom collection.
- A wildlife rehabilitation center brought rescued animals (an owl and a baby raccoon) to visit the classroom. Children learned about ways that animals use trees for food and shelter.
- The group created bird feeders to hang in a tree near their classroom window. An observation journal, binoculars, and bird guide were kept near the classroom window, allowing children to record activity at the feeder.
- When the time came for the fallen tree to be removed from the playground, children talked with workers about their tools, and about what would happen to the tree after it was removed. Children were allowed to view the tree removal process from a safe distance. A section of the tree trunk was saved, and later brought to the classroom to serve as a bench in the science center.
- Children brought items made of wood for show and tell day.
- The teacher found songs and fingerplays about birds, squirrels, acorns and trees to fill waiting time during transitions, such as waiting to wash hands before lunch.
- A family fun day was planned at a local state park. On a Saturday, children and families were invited to join teachers for a nature hike, a visit to the park nature center, and a picnic lunch.
- The class collected money to purchase a new tree for their playground. When funds were raised, the group took a field trip to a local garden center to learn about trees and to select a tree for their playground. The children helped plant and care for the new tree throughout the year.

The children's strong interest in their tree, and in forests and forest wildlife, continued for more than a month. As spring days grew warmer, the teacher noticed that the children were growing more and more focused on playing with water on the playground. She observed them pouring water into holes dug in the sandbox, stirring pretend "soup" with twigs before filling cups and bowls, and drawing with wet fingers on the chalk board. Soon a new study on properties of water was underway!

The Serendipity Scientists: Exploration with infants & toddlers

What is science?
Science is defined as the knowledge gained by the study of the physical world. Science first "happens" when the scientist observes the world through his/her senses, and begins to make guesses about how and why things happen. By continuing to observe and test these guesses, the scientist forms a hypothesis—an explanation that accounts for a set of facts. Later, the scientist will use the learned information to guide his/her actions.

*By this definition, human beings are **born scientists**. It is our nature to explore and discover!*

What does science look like for infants and toddlers?

It is important to remember that babies do not know what we know. Their world is a mystery. Fortunately, baby doesn't sit around and passively wait to be taught new things. She is ready to explore, and does so almost every waking minute!

- When tiny Rosa first bats at toys, she learns that she can use her body to make things happen. She's building spatial awareness!
- Six-month-old Anton's caregiver covers a teddy bear with a blanket and then whisks the blanket away to reveal the "hiding" bear. Anton shrieks with laughter. He's discovering object permanence.
- When a ball rolled against a wall bounces back to one-year-old Sydney, she experiments with cause and effect.
- Fourteen-month-old Kosuke toddles across the grass to splash with his bare feet in a puddle left by the hose. What a wonderful sensory discovery!
- Two-year-old Autumn can't quite reach her sippy cup of milk from her booster seat at the table. She gives the tablecloth a gentle tug, and voila!—the milk cup slides into reach. She used logical reasoning skills to solve her problem.
- 2 ½ -year-old Sean pulls all of the red, oval-shaped, pop beads out of the box to make a choo-choo train. He's building classification skills.

They aren't wearing lab coats, but inside each playful infant and toddler is an active mind that is learning about the consequences of actions. It's not "just play"—it is science!

What role does the adult play in baby's discovery? Does she need our help, or is it something she will do on her own?

Actually, it is both. The baby will naturally explore through play, but we can structure the environment and join in her play to help learning happen! Use the checklist below to assess your environment.

Childcare Environment Assessment

Encouraging Exploratory Play

____The area offers comfortable, roomy indoor spaces for children to play. The space is not uncomfortably crowded with furniture, toys, and people.

____Low storage areas and open containers in the play areas allow children to select their own toys. For young infants, a variety of appealing toys are placed within the child's reach; new toys are offered periodically.

____Plenty of toys are available, but shelves and toy storage spaces are not overcrowded with toys. Some interesting toys are set apart, on play mats or tables, to attract the children's interest. Toys are rotated regularly to maintain interest.

____Excessive visual clutter is avoided, while maintaining a cheerful and inviting area. (Example: Solid-colored pillows are placed on a brightly patterned rug in the toddler room book corner.)

____Auditory overstimulation is also avoided; care is taken to not have too many sources of sound—CD players, musical mobiles, noisy electronic toys—present at one time.

____Mobile infants and toddlers are offered a protected area for self-regulated rest and quiet play. Other areas provide space for active gross motor play, such as dancing, rocking, and ball play.

____A wide variety of materials and textures are represented in the area's furnishings and toys. For example, soft stuffed toys and sturdy wooden toys are offered, in addition to plastic toys.

____Toys are selected for play value. Some toys that are ideal for discovery play are represented.

____The play area includes windows and child-safe mirrors at child's eye level.

____Outdoor play spaces are utilized two or more times a day, weather permitting. Outdoor spaces include access to sun and shade.

____The outdoor area for young infants is soft, safe, and protected.

____Toddlers and mobile infants have room & equipment outdoors for exploration, including vehicles to roll, balls to toss, safe areas to climb, and grassy areas to discover.

____Toddlers have frequent opportunities for sensory play with water, indoors or outside, weather permitting.

How can the caregiver facilitate learning?

- Structure the environment. Provide toys, play places, and playtime to give baby the time, space, and materials that she needs to explore.
- Select toys carefully. Some toys are better for discovery play than others. For example, a talking toy telephone may be fun for dramatic play, but does not offer many opportunities for experimentation. A set of stacking cups, on the other hand, can be used not only for stacking, but also for building, filling and dumping, sorting, etc.

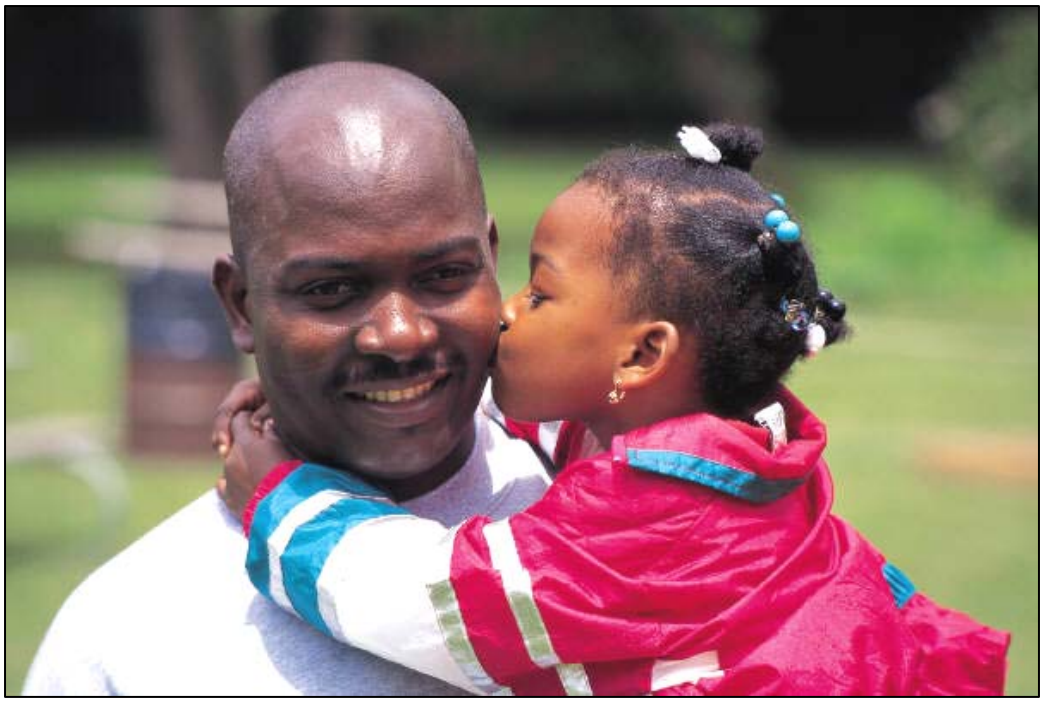
  Many of the best learning toys are
  - simple
  - used for genuine "cause & effect" learning
  - made of appealing materials
  - open-ended; they can be used in more than one way.

  While not every toy offered must fit the criteria listed above, offer at least *some* toys that do!
- Pair or group toys wisely to encourage new skills and discoveries. For example, plastic zoo animals are fun by themselves, but pair them with different sizes of plastic baskets, such as berry baskets, and children will experiment with placing the animals in and under the baskets and begin to sort and classify. Or, offer large popsicle sticks with a tray of play dough. Toddlers may use the sticks to poke and cut the dough, or they may use the dough as "glue" to join several sticks together into a three-dimensional creation.
- Be actively involved. Get down on the floor and join infants and toddlers in their play! Few things are more delightful to a child than an enthusiastic adult to share in her discoveries! In addition, you can help provide words for the child's actions. ("You pushed the rubber ducky under the water, but it popped right back up again! The duck floats!")

While it is important not to take a puzzle piece or toy away from the child to do it for her, you may occasionally model a next step in play. For example, a child who is shaking a toy top may benefit from you saying, "Look—you press down the handle, and it spins around," while modeling this action. It is also important, however, to allow any use of toys and materials that is not destructive or dangerous. Babies explore with their hands, feet, mouths, and bodies. Toddlers often experiment with dumping out toys, putting containers on their feet or heads, and crawling on or under furniture. Supervision and safety guidelines are needed, but try to welcome any exploratory play that is not potentially harmful.

The path to life-long learning begins at birth. By carefully planning the environment and joining in children's playful explorations during the infant and toddler years, you help set the stage for remarkable discoveries!

Learning with Families



What have I learned from families?
Patience. Courage. Empathy.
Rita Neve
Booneville

Transition Books

Many teachers use social stories to help children prepare, cope or modify behaviors such as anxiety attacks, anger management, or making friends/social skills. In the same way, a transition book can be provided to help families prepare their child for school.
Transition books are beneficial for both parents and children. It can be a useful way to help prepare children for what school will be like each day. They can also help families understand what a typical day is like for their child, since many of them have limited experience with a child development program.

How to Make a Transition Book

1. Think about what a typical day is like in your program--what the major events will be for a child each day and important things they will see. These might be arrival and signing in, cubbies, goodbye hugs, teachers, classroom, playground, snack table, cot, parents return and goodbyes.
2. The book should focus on the ideas that children will be safe and have fun.
3. Take photos of the events you have chosen and dictate your story. Be sure to use developmentally appropriate language and keep sentences simple and short.
4. You may choose to create pages in a Word document, place in protective sleeves and keep them in an inexpensive binder. You can also find companies on the Internet that will print and bind your books.

How to Use a Transition Book

1. Welcome a new family by providing a copy of the book to the family at least one week prior to the child's entry into the program.
2. Ask the family to read the book with their child and to talk about the new experience. Encourage them to answer any questions and address any concerns the child has.
3. Encourage families to contact you if questions arise that they do not know or feel comfortable answering.
4. Remind families that children are often anxious about a new situation and it is a totally normal reaction. Encourage parents to remind children that they will be safe during the day and that they will return after a specific time in the day (I will return after rest time, after afternoon play, etc.).

It is beneficial for children to see their real teachers in the book as it will help familiarize them to the real people. When you have new staff, you can insert a new photo, rather than creating a new book. Using a binder makes it is easy to switch out a new photo and easy to replace the book or parts of it should it be lost or damaged. The focus of the book is to assist parents in helping their child transition well. Another consideration is that different age groups have different experiences and schedules. Each age group would benefit from their own book tailored to their own experiences.

A Sample Transition Book

I Love School

A book to help children and families understand what a day in preschool is like.

This is my school. I go to school each day while my family goes to work. I like going to school because it is fun.

1

This is my cubby. We put my backpack and my blanket in it. This is my special place where I can keep my things. They will be safe while I am at school.

2

Each morning my family drops me off. First, we write my name on a special book outside my classroom. It lets my teacher know that I am here today.

3

Now it is time for bye hugs. I will miss my family, but I know they will be back at the end of the day. I will be safe while they are gone. I can have fun with my friends.

4

This is Ms. Wanda and Ms. Lisa. They are my teachers and keep me safe while I am at school. They like to play in centers with me. I love them.

5

This is my classroom. Each day I come here to play with my friends. There are lots of toys that I share with my friends in the different centers.

6

There is a playground just for our class. I will play outside with my friends. There is a slide and riding toys. There is even a playhouse. I love playing outside!

7

I will eat snacks and lunch while I am at school. I will wash my hands and then I get to sit at a table to eat with my friends. I will eat healthy snacks that will help my body grow. Yum, Yum!!!

8

This is my cot. It is my special bed to rest on while I am at school. My body needs rest so I can play this afternoon.

9

Now it is time for my family to pick me up. School is over until tomorrow. I will give my family great big hugs. Then, I will tell them about all the fun things I did while I was at school.

10

I love school!!

11

10 Ways to Appreciate Your Children

Share the "10 Ways to Appreciate Your Child" card with families. (Information on ordering the cards is found on page 72.) You may choose to add a photo of the child to the top of the card and attach a magnet strip to the back.

10 Ways to Appreciate Your Children

1. Tell them you love them.
2. Take a walk with them or do something special together.
3. Play a game with them.
4. Share highlights from your day.
5. Listen when they talk to you.
6. Be positive and praise them.
7. Draw a picture together and put it up on the wall.
8. Make some cookies together.
9. Read a book together.
10. Give them hugs or hold their hand.

A good way to distribute the cards is to host a family meeting and share additional ideas related to the "10 Ways". Engage families in activities that support one or more of the 10 points. The following pages provide an example of a meeting on the topic "Read a book together."

Family Meeting:
Reading with Your Child

Goal

The goal for this meeting is to help parents and other family members understand the importance of reading to their children.

Facilitator Notes

- Some participants may not be able to read well. Others may get nervous when asked to read or speak in public. Ask for volunteers and make it light hearted if they make a mistake.
- Display a table of good children's books for participants to review.
- Display family literacy packs that are available for checkout.

Discussion

What are some reasons for reading to your children?

- When you hold them and give attention, they know you love them.
- It encourages them to become readers.
- It introduces new skills and concepts.
- Children's books today are so good and fun for adults too!
- Until they learn to read, they will think you are amazing.
- Emphasize there is always room for a book.

Activity

Brainstorm where you can keep books. Some suggestions would be carry in diaper bag, take to dentist/doctor office, keep in car, on open low shelves or in baskets in different rooms of your home.

Discussion

- *Where and when can you read?*
- *Discuss appropriate types of books for different ages.*
- *Ask participants to discuss some of their favorite books when they were children or books that they enjoy reading with their own children.*

Facilitator Note

- Model good selections in your class for participants.
- Provide a lending library if possible, filled with good quality children's literature that families can enjoy with their children.
- Providing literacy packs for families can also be a valuable tool in facilitating reading.
- Be sure to include books that represent diversity and books in the family's native language.

Activity

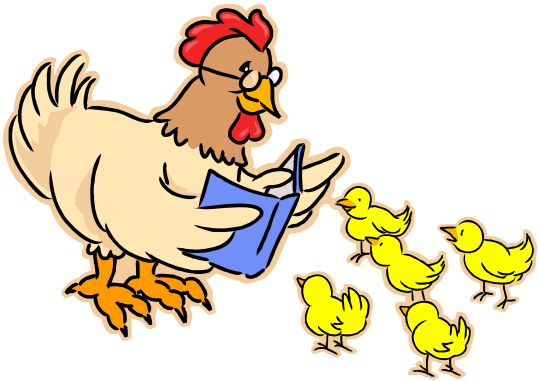
- Choose one of your favorite children's books to be read in the meeting. You may read it or a participant may volunteer to read. You could model voice changes, pauses, and dramatic effect to be used in good story reading. Possible books to share might be *The Little Red Hen, The Kissing Hand,* or *Caps for Sale*.
- Ask participants to create something about the story when you are finished reading it. You can provide scissors, magazines, crayons, markers, glue, paper, clay, etc for participants to make a creation. You could also do a cooking activity if it fits your book. For example, you might provide bread dough for participants to make, if you read *The Little Red Hen*, or oatmeal taste testing if you read a poem such as "Little Miss Muffet".

Wrap-up

- Remind participants how important reading is for their child's development, as well as how much fun reading can be.
- Thank everyone for participating.
- Remind them when the next meeting will be and other important information.

Take Home

Provide each family with a book if possible and ask them to read the book with their child. Prior to the meeting, ask businesses to donate enough books for each family to have one. If that is not possible, you could provide a short poem or story typed out with a prop such as Little Miss Muffet and a pack of instant oatmeal for families to enjoy at home with their children.



Appreciating Children's Work: Using Scrapbook Techniques

Scrapbooks are a useful way to show families the important things going on in your program. A picture is worth a thousand words, so displaying a **group scrapbook** for families to review may help them better understand and feel a part of their child's' experience.

When scrapbooking techniques are used to document children's experiences, it is essential to include a brief written statement. The statement should describe the context of the artifact, such as "In the block center during free play time...," or "After we the fire truck visited our center...." Next, describe what the child did and what the child was learning. The last step is to explain why this was an important experience—why did you choose to include this particular piece in the scrapbook?

Another idea is to make a small scrapbook for each family at the end of the year. Items to place in the **individual scrapbook** might include

- Samples of child's art work
- Writing samples
- Photos of special events
- Group photo
- Photos of the child involved in learning experiences

Children can also choose items to place in the scrapbook. This is meaningful to them, as well as to the parents. If you choose to do make one scrapbook and distribute a copy to each family, you should consider confidentiality and make sure all families give permission for you to share pictures of their children.

You might also **invite families to contribute** to the group scrapbook by bringing family photos to place in the book. This can be kept in the dramatic play center or the book center all year long for children to review. Scrapbooks can be very simple or elaborate depending on the time and comfort level you have with the materials.

Some programs choose to keep a **scrapbook of each project or topic** of study they do with the children. These scrapbooks include topic concept webs, photos of the children doing the study, photos of field trips taken, photos of visitors, and artifacts collected during the study. These can be placed near the entrance for families to view at drop off or pick up times.

A group scrapbook can be a tool to show **visiting families** what is happening in your program. The photos and other artifacts help parents get better acquainted with your program's people and activities.

Scrapbooking techniques can be used for a **single photo or piece of artwork**. Sending home a child's work on a scrapbook-like page let's families know that the work represents an important experience.

Share scrapbooking techniques in a **family make-and-take** session. As families create scrapbook pages with their children's work, you can discuss how children learn and what they are learning in your program.

Essential Scrapbook Materials

Photos and Artifacts

Have the photos for the page you'll be working on handy. Be thinking of which photos will require cropping and trimming. If you also have mementos to accompany the photo, you'll want to have those nearby as well. Store all items for each page in an envelope so that they don't get separated.

Scrapbook with Pre-purchased Pages

Start with your pre-made hard cover scrapbook with the insert pages. It may be much easier to prepare the scrapbook by taking the insert pages out of the book. You can assemble the book along the way or after all pages are completed. This will keep the pages flat and allow for the adhesives to dry before bending and curving inside of the book.

Paper

Categorized your scrapbook papers for easy decision-making when it comes to making frames and accents for your pages. Having them sorted by color will help make it easy to select.

Embellishments

Start a collection of purchased stickers, as well as items that you have around the house. Create an organized system of storing your decorations such as brads, stickers, objects, ribbons, buttons, cut out images, rubber stamps and ink pads.

Cutting Tools

There are a lot of fancy tools on the market to make scrapbooking a cinch, but the very basic tools required will be a high-quality pair of scissors, a paper trimmer, hole puncher, and some basic shape punches.

Adhesive

Once your page is laid out and ready to be assembled, there are many options in adhesives. You can choose from the permanent never-going-to-budge glues to the oh-so-forgiving dots of glue that allow you to set, and then reset your elements. Double-sided tape also works great, but you'll want to be sure your placement is precise, or you'll risk tearing your paper if you try to reset it.

Some Web sites that might help get you started

- www.intoscrapbooking.com
- www.basicsofscrapbooking.com
- www.scrapgirls.com
- http://scrapbooking.about.com
- http://42explore.com/scrapbk.htm
- www.scrapbookscrapbook.com (scrapbook supplies and clip art)
- www.scrapbooks.com (scrapbook outlet)
- www.scrapbook-creations.com (scrapbook supply store)

Exploring the World Together

Children must have thrown their watermelon seeds from the Fourth of July into the garden. As the vine began to grow, many of us wondered just what was going on as we knew we hadn't purposefully planted anything. Eventually the flowers appeared and then one lone watermelon. Several adults wondered just how that happened, so we took the flower apart and showed them where the watermelon got its start. Life's simplest lessons….

Jackie Buxton
Harrison

Materials to Encourage Exploration

Microwave Fun Dough

Ingredients

- Regular Bisquick baking mix
- Salt
- Cream of tartar
- Water
- Food coloring

You'll Also Need

- Large, microwave-safe bowl
- Measuring cups & measuring spoons
- Large spoon or spatula

Microwave Fun Dough Directions

Stir together 1 ¼ C. Bisquick, ¼ C. Salt, and 1 tsp. cream of tartar in microwave-safe bowl. In a measuring cup, add food coloring to 1 C. of water. Stir the colored water into the dry mixture a little at a time. Microwave, uncovered, on High for 1 minute. Stir, scraping sides of bowl. Microwave, uncovered, 2 or 3 minutes longer, stirring every minute, until mixture almost forms a ball. Remove dough from bowl and let cool slightly. Knead until smooth; if dough seems sticky, roll in Bisquick powder and knead again.

Tips & Hints

Store in air-tight container in fridge. This dough is much better than traditional salt dough, and modeling with warm dough is very soothing! Consider using the dough as a base for collage with small seashells, pebbles, mosaic pieces, and twigs.

Fun Foam

Ingredients

- Baby or child shampoo
- Water

You'll Also Need

- Mixing Bowl
- Handheld Electric Mixer

Directions

Using an electric mixer, combine 3 Tbsp. of shampoo with a dash of water. You'll have mounds of fun foam in no time! Pour onto a tabletop to allow children to draw in the foam, play with toy animals and cars, etc.

Tips & Hints

Watch for slippery spills on hard floor surfaces. Consider making a large batch for play outside with a sprinkler. This product may look a lot like shaving foam, which is "off limits" in most programs. Be prepared to explain that it is made with non-toxic, kid-friendly ingredients!

Gooey Glue Putty 1

The quickest & easiest glue putty

Ingredients

- Elmer's Glue-All white glue (*not* washable school glue!)
- Liquid Starch (Found on the laundry detergent isle)
- Food coloring (optional)

You'll Also Need

- Mixing bowl
- Something to stir with (If you're really brave, just use your hands!)
- Zipper bag or lidded plastic container for storage

Directions

Combine equal parts glue and liquid starch. One easy way to do this is to dump one bottle of glue into a bowl, then refill the glue bottle with starch and dump the starch into the bowl. Add a tiny bit more starch, so that you have a little more starch than glue. Stir gently to mix.

Remove the putty from the bowl, allowing extra starch to drip off. Fold and knead to an even consistency. If the putty is sticky, add more starch. If it is stringy, you probably used a little too much starch; the putty will still be fun, but try adding a little less next time!

Food coloring can be folded in by spreading the glob of putty, adding a few drops of color, folding the putty over to cover the food coloring, and then folding and squeezing to mix. Putty will keep in a zipper bag for several weeks.

Tips & Hints

Do not place the putty on fabric or carpet. If it happens to get into a child's clothing, rinse well in very hot water to remove. Try using the putty with a rolling pin, a dough extruder, butter knives, various small containers, and even a colander. How is the putty like play dough? How is it different? Can you figure out how to use a small hand pump (such as a balloon pump or a portable bike pump) to make a putty bubble?

Gooey Glue Putty 2

The most consistent & reliable glue putty

Ingredients

- 8 oz. bottle Elmer's Glue-All White Glue (*not* washable school glue!)
- Borax powder (found on the laundry detergent isle)
- Warm water
- Food coloring (optional)

You'll Also Need

- Mixing bowl
- Plastic cup
- Something to stir with
- Zipper bag or lidded plastic storage container

Directions

Empty the glue bottle into the mixing bowl. Refill the bottle with warm water, recap and shake gently, then empty into the mixing bowl. Mix the glue and gluey water well. Stir in a few drops of food coloring, if desired. In the plastic cup, combine ½ C. warm water with 1 teaspoon of Borax. Stir vigorously to mix; all of the Borax may not dissolve. Slowly add the Borax-water solution to the glue-water solution while stirring. Continue adding the Borax solution until the putty reaches the desired consistency. Fold and knead to putty perfection!

Finger Paint

Ingredients

- Cornstarch
- Unflavored gelatin
- Food coloring or poster paint
- Water

You'll Also Need

- 2 saucepans
- 1 small mixing bowl
- Measuring cups
- Clean, empty baby food jars or other small storage containers

Directions

In a saucepan, combine the ½ C. cornstarch with ¾ C. cold water to make a smooth paste. Soak 1 packet of unflavored gelatin in ¼ C. cold water. Set aside. Pour 2 C. boiling water over the cornstarch solution, and mix well. Cook over medium heat, stirring constantly, until the mixture boils and clears. Remove from heat and stir in gelatin. Cool and divide into several small containers. Stir in food color or poster paint to tint.

No-Trouble Bubbles

Ingredients

- Warm water
- Liquid dish soap (Plain Dawn or Joy work great! Avoid ultra-concentrated or lotion soaps)
- Liquid glycerin (available at the drug store)

You'll Also Need

- Bucket or storage tub
- Bubble wands – For starters, try clean flyswatters, wire clothes hangers bent into hoops, round cans from frozen juice with both ends removed, pipe cleaner shapes, and/or plastic strawberry baskets (the green ones with holes!)

Directions

Combine 1 gallon warm water, 2/3 C. dish soap, and 2 to 3 Tablespoons glycerin. Mix very gently using your hand.

Hints & Tips

Works even better if allowed to "age" uncovered overnight. Mix and dip wands gently – churning up foam on top of the bubble solution will make it much harder to get good bubbles. If you have safety goggles or other eye protection, you might opt to use them. Otherwise, just have a clean, wet cloth on hand in case children splash bubble soap in their eyes.

Extension Ideas

- **Kid-in-a-Bubble –** Have a brave volunteer sit in a kiddie pool filled with a couple of inches of bubble solution. Use a hula hoop to bring a bubble tube up around the child, allowing him/her to see the world from inside a bubble!

- **Bubble Tray –** Carefully fill a cookie sheet with bubble solution. Kids can use halved drinking straws to blow whole bubble worlds on the tray. Can they make bubbles inside of bubbles? Can they make a bubble dome that covers the whole tray?

- **Bubble Prints** – Add a couple of inches of bubble solution to each of several bowls. Add several drops of food coloring to each bowl. Children can use halved drinking straws to blow bubbles up over the edge of the bowl, and then quickly lay a sheet of light colored paper on top of the bowl to "catch" the bubbles, making prints. A really fun way to make homemade gift wrap!

Invisible Ink

Ingredients

- Baking soda
- Water
- 100% grape juice (purple)

You'll Also Need

- Q-tip or small paint brush
- Cotton ball or chunky paint brush
- White or light-colored paper
- 2 cups or bowls

Directions

Mix several tablespoons of baking soda into a bowl of water. Use a Q-tip or paint brush dipped in baking soda solution to draw or write a "secret" message on paper. Let dry completely. To reveal the message, paint over the entire page with a cotton ball or clean paint brush dipped in grape juice. The message will magically appear in green!

Tips & Hints

Older children can explore the scientific principles at work here; grape juice is a natural pH indicator. What happens if you write with lemon juice, let it dry, and paint over it with grape juice?

Clean Mud

Ingredients

- Bar soap
- Toilet paper
- Water

You'll Also Need

- Lidded plastic tub for mixing and storage
- Cheese grater

Directions

Grate 1 bar of soap and place in plastic container. Have children help shred three rolls of toilet paper into small pieces, and add to the tub. Add water and mix to desired consistency. Children can squish, mold, and mix the "clean mud"—great sensory play fun!

Tips & Hints

Proportions and consistency can be modified however you want; anything goes! Children love to help rip up the toilet paper and the mixture makes the whole room smell clean! Try doubling or tripling the recipe to make a mega batch! Stores well—just add more water as needed. Sculptures made with clean mud can also be air-dried.

Cornstarch Goop

Ingredients

- 1 box corn starch
- Water

You'll also need

- Large bowl, bucket, or other mixing container
- A very mess-friendly place to work (outside is best!), plus smocks or old play clothes

Directions

Empty about ¼ box of cornstarch into a large mixing container. Add about ½ C. water and stir. Slowly add more cornstarch and more water until you have a liquid mixture that is thicker than honey and does not stir easily. It takes a little experimenting to get it right, but you will hopefully end up with an amazing "non-Newtonian fluid". What makes it so amazing? Move it quickly, by stirring vigorously, rolling a bit of goop into a ball, etc., and it acts like a **solid**. Move it slowly, and it acts like a **liquid**. Try slapping it with your hand, or rolling a small ball to throw against the ground. What happens?

Tips & Hints

This is a great experiment to do when you can hose the children down afterwards! The goop will not stain clothes, but it **will** clog drains! Have children rinse the excess goop off their hands with a hose or bucket of water before washing at the sink, and do NOT pour your leftover goop down a drain! Goop can be stored for several days in a lidded plastic container; just add a little more water if needed. If you accidently add too much water to your goop, just leave it uncovered for several hours or overnight to allow some of the excess water to evaporate. Can older kids figure out what "Non-Newtonian" means? (Hint: it has to do with viscosity!) And, how is goop similar to quick sand?

Learning Together as Early Childhood Professionals

Networking, sharing, and coming together to seek answers – by connecting with one another, we can work collaboratively to create amazing learning opportunities for our children and families! Perhaps one of the most valuable resources a teacher can have is the support of others teachers. By sharing our insight and ideas with one another, we are able to learn not only from our own experiences, but from the experiences of many other wise and wonderful teachers!

Recently, readers of QI Direct were asked to share their stories about **learning together with children**. Some of these stories, submitted by program directors, classroom teachers, and students, have been paired with articles throughout this book. Here are some additional anecdotes from around the state.

If we got all the students involved, this would make them feel like they're learning, and also involve them in the curriculum.
Kelly Parson, Early Childhood Student, Southern Arkansas University

I learned a very important art lesson from my high school art teacher. When my classmates were coming to art class, they complained that they couldn't draw or that they didn't have an imagination. She handed each student a ball of clay. Every student started playing with it in their hands and molding it. Before you knew it, everyone was talking openly. When Mrs. Shambach stopped us, every person had made something different. The whole moral of the lesson was that everyone is different and unique in their own special ways. There are no right or wrong answers when it comes to art and you can do anything that you want to do. Even though dreams sometimes change, important teachers in your life will always remain.
Melissa Watson, Early Childhood Student, Southern Arkansas University

While observing in a kindergarten class, I had the opportunity to watch the children learn how to make butter. The students had read the book The Little Red Hen and Mrs. Rich showed the children how to make their own butter. The students enjoyed shaking the containers and watching the whipping cream turn into butter because of the movement and the warmth from their hands. The next day the class made bread and used the butter they made to eat with it. This activity is all that the students could talk about. They had a sense of pride when talking about the butter because they had helped make it. I loved this idea because it involved the children and they enjoyed the activity.
Alice Rhinehart, *Early Childhood Student, Southern Arkansas University*

Resources

Additional resources to help you learn with children, families, and colleagues.

Resources for Teachers and Families

Burman, L. (2009). Are you listening? Foster conversations that help young children learn. St. Paul, MN: Redleaf Press.

Chalfour, I. and Worth, K. (2004). Building structures with young children. St. Paul, MN: Redleaf Press.

Chalfour, I. and Worth, K. (2005). Exploring water with young children. St. Paul, MN: Redleaf Press.

Chaille, C. (2008). Constructivism across the curriculum in early childhood classrooms: Big ideas as inspiration. Boston: Pearson Education, Inc.

Curtis, D. and Carter, M. (2000). The art of observation: How observation can transform your teaching. St. Paul, MN: Redleaf Press.

Curtis, D. and Carter, M. (2003). Designs for living and learning: Transforming early childhood environments. St. Paul, MN: Redleaf Press.

Curtis, D. and Carter, M. (2008). Learning together with young children. St. Paul, MN: Redleaf Press.

Gould, P. and Sullivan, J. (1999). The inclusive early childhood classroom: Easy ways to adapt learning centers for all children. Beltsille, MD: Gryphon House, Inc.

Helm, J. and Katz, L. (2001). Young investigators. New York: Teachers College Press.

Jablon, J., Dombro, A., and Dichtelmiller, M. (2007). The power of observation for birth through eight, 2nd ed. Washington, DC: Teaching Strategies, Inc. and National Association for the Education of Young Children.

Masi, W. (2001). Toddler play: 100 fun-filled activities to maximize your toddler's potential. San Francisco, CA: Weldon Owen Publishing.

Masi, W. and Leiderman, R. C. (2001). Baby play: 100 fun-filled activities to maximize your baby's potential. San Francisco, CA: Weldon Owen Publishing.

Moomaw, S and Hieronymus, B. (2002) More than magnets: Exploring the wonders of science in preschool and kindergarten. St. Paul, MN: Redleaf Press.

Neugerbauer, B. (1996). The wonder of it: Exploring how the world works. Redmond, WA: Exchange Press, Inc.

Neuman, S. and Roskos, K. (2007). Nurturing knowledge: building a foundation for school success by linking early literacy to math, science, art, and social studies. New York: Scholastic, Inc.

Silberg, J. (2001). Games to play with babies. Beltsville, MD: Gryphon House, Inc.

Silberg, J. (2002). Games to play with toddlers. Beltsville, MD: Gryphon House, Inc.

Stacey, S. (2009). Emergent curriculum in early childhood settings. St. Paul, MN: Redleaf Press.

Warner, P. (1999). Baby play and learn: 160 games and learning activities for the first three years. Minnetonka, MN: Meadowbrook Press.

West, S. and Cox, A. (2001). Sand and water play: Simple, creative activities for young children. Beltsville, MD: Gryphon House, Inc.

Worth, K. and Grollman, S. (2003). Worms, shadows, and whirlpools. Portsmouth, NH: Heinemann, and Washington, DC: National Association for the Education of Young Children.

Zigler, E., Singer, D., and Bishop-Josef (2004). Children's play: The roots of reading. Washington, DC: Zero to Three Press.

Web Sites

Three classroom journals (birds, bubbles, and farms) to get you started with your own project. http://projectsparkle.org/journals.php

The question, "Where does our lunch come from?" sparks a series of explorations for preschoolers. http://ecrp.uiuc.edu/v7n1/floerchinger.html

Examples of children and adults learning together through projects. Click on "Project Examples", then select Grades 1-3 or Pre-kindergarten-Kindergarten. http://www.projectapproach.org

Center for Effective Parenting has handouts on child development topics for parents and professionals. www.parenting-ed.org

Children's Books

Books about life events

Children Just Like Me: Celebrations! by Anabel Kindersley and Barnabas Kindersley
Franklin Goes To The Hospital by Paulette Bourgeois and Brenda Clark
Hello Baby! by Lizzy Rockwell
Jake Baked the Cake by B. G. Hennessy
Julius, the Baby of the World by Kevin Henkes
Night at the Fair by Donald Crews
The Relatives Came by Cynthia Rylant and Stephen Gammell
The Storm Book by Charlotte Zolotow and Margaret Bloy Graham
When You Go to Kindergarten by James Howe and Betsy Imershein
The Noisy Book by Margret Wise Brown
Pop! A Book About Bubbles Kimberly Brubaker Bardley
It Looked Like Spilt Milk by Charles G. Shaw

Books about familiar animals

Big Red Barn by Margaret Wise Brown and Felicia Bond
Fish Is Fish by Leo Lionni
Hondo and Fabian by Peter McCarty
In the Small, Small Pond by Denise Fleming
In the Tall, Tall Grass by Denise Fleming
Nuts to You by Lois Ehlert
Stranger in the Woods by Carl R. Sams and Jean Stoick
The Butterfly Alphabet by Kjell B Sandved
The Life and Times of the Ant by Charles Micucci
The Salamander Room by Anne Mazer
Animals Should Definitely Not Wear Clothing by Judi Barrett
Biggest, Strongest, Fastest by Steve Jenkins
Do Lions Live on Lily Pads? by Melanie Walsh
Where Do Butterflies Grow by Joanne Ryder
How Many Ways Can You Catch a Fly? by Robin Page

Books about nature

Katy and the Big Snow by Virginia Lee Burton
Leaf Man by Lois Ehlert
Pumpkin Circle: The Story of a Garden by Levenson and Thaler
Sky Tree: Seeing Science Through Art by Thomas Locker and Christianson
The Happy Day by Ruth Krauss
The Little Yellow Leaf by Carin Berger
The Snowy Day by Ezra Jack Keats
If I Were a Tree by Dar Hosta
Planting a Rainbow by Lois Ehlert
How a Seed Grows by Helene J. Jordan
If You Find a Rock by Peggy Christian
Growing Vegetable Soup by Lois Ehlert
Pumpkin, Pumpkin by Jeanne Titherington
Red Leaf, Yellow Leaf by Lois Ehlert
The Carrot Seed by Ruth Kraus
The Seasons of Arnold's Apple Tree by Gail Gibbons

Books about vehicles, construction, and city scenes

Big Book of Trucks by DK Publishing
Chugga Chugga Choo Choo by Kevin Lewis
I Stink! by Kate Mcmullan and Jim Mcmullan
Richard Scarry's What Do People Do All Day? by Richard Scarry
Smash! Mash! Crash! There Goes the Trash! by Barbara Odanaka
The Wheels on the Bus by Byron Barton
Two Little Trains by Margaret Wise Brown

Books to support classroom discoveries

First the Egg by Laura Vaccaro Seeger
From Seed to Plant by Gail Gibbons
Harold and the Purple Crayon by Harold Crockett
Little Blue and Little Yellow by Shel Silverstein
Mouse Paint by Ellen Stoll Walsh
Not a Box by Antoinette Portis
Lots and Lots of Zebra Stripes by Stephen Swinburne
How Big is a Foot? By Rolf Myller
Measuring Penny by Loreen Leedy
Pattern Bugs by Trudy Harris

T-Shirt Day
April 21, 2009

Join with others across the state
and wear you ACW shirt with pride!

Need to order t-shirts?
1-800-445-3316 or 501-682-9699

All Arkansas Children's Week resources are available online!
http://www.accessarkansas.org/childcare

Arkansas Children's Week 2009
Order *free* materials for your families and community!

Name: _____

Program/licensed capacity: _____

Mailing address: _____

City/Zip _____

Item	Number requested
Church Bulletin Insert	
Family Fridge Tag: "10 Ways to Appreciate Your Child"	

Return form to: Division of Child Care and Early Childhood Education
Box 1437 Slot S 160 (Program Support)
Little Rock, AR 72201

Or fax to (501) 682-4897

ARKANSAS CHILDREN'S WEEK WORKSHOP SCHEDULE

Refer to the TAPP Registry Training Opportunities, http://professionalregistry.astate.edu, to register and to confirm dates and locations. All workshops will be 5:30-8:30 p.m., EXCEPT the Saturday sessions (Arkadelphia, Texarkana, Mountain Home, Nashville, and Hot Springs), which are 9:30 a.m.-12:30 p.m.

Place	Date	Site
Arkadelphia	***9:30-12:30*** March 7	Community Family Enrichment Center, 301 N. 23rd St. (in Feaster Park)
Batesville	March 3	U of A Community College, Batesville 2005 White Drive
Bentonville	March 31	Early Childhood Initiatives Center, Helen R. Walton Children's Enrichment Center, 1701 NE Wildcat Way
Cabot	March 17	First Methodist Church, Family Life Center 2003 South Pine
Camden	March 16	SAU Tech, TE Bldg. Rm. 117 100 Carr Road
Conway	March 16	*To be announced. Please check the TAPP Registry, http://professionalregistry.astate.edu*
Fayetteville	March 24	The New School 2514 New School Place
Fort Smith	March 11	Parker Center 811 North T. Street
Harrison	April 6	North Arkansas College, South Campus JPH Kitchen Side 1515 Pioneer Drive
Hot Springs	*9:30-12:30* March 21	Champion Baptist College 600 Garland Avenue
Jonesboro I	March 12	ASU Childhood Services 615 University Loop East
Jonesboro II	March 24	ASU Childhood Services 615 University Loop East
Little Rock	March 9	*To be announced. Please check the TAPP Registry, http://professionalregistry.astate.edu*
Monticello	March 30	UAM Gibson Center, Caucus Room 517 University Drive
Mountain Home	***9:30-12:30*** April 4	First United Methodist Church 605 West 6th
Nashville	*9:30-12:30* April 4	Cossatot Community College U of A 1558 Hwy 371 W
Pine Bluff	March 10	JRMC Conference Center, 1600 West 40th Use rear entrance on 42nd Street
Russellville	March 16	Lake Point Conference Center Business Services Building 61 Lake Point Drive, Training Room A
Texarkana	*9:30-12:30* March 14	Sugar Hill United Methodist Church 1621 Sugar Hill Road
West Memphis	March 3	First United Methodist Church 215 North Missouri
Wynne	March 10	First United Methodist Church 800 North Falls Blvd.