

Fine Motor Activities For Preschoolers

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Why does it matter which fine motor activities my child is doing now?

These are important years in the development of a child's hand skills. Activities that children are doing now lay the foundation for their skills in writing, cutting and other tool use in grade school. A lack of appropriate activities and/or forming of bad habits can greatly hinder their fine motor skills in school. Parents can help their children avoid this scenario by understanding a few basic principles.

The first principle that parents need to keep in mind is to let the child's skill development occur as he or she is ready. Trying to rush children into doing something they are not ready for can cause more damage than good. For example, learning to write is a complex skill that most children are not ready for until approximately 6 ½ years old. By this age, they have a mature pencil grasp and have adequate hand strength for more sustained pencil work. Their visual motor skills are mature enough to independently draw vertical, horizontal and diagonal lines, a circle, square, X and a triangle. (Beery, 1989). Likewise, most children have developed enough skills in the area of vision, hand dexterity, and hand dominance for writing. Trying to teach a 3- to 4-year old child how to write can cause the development of a maladaptive pencil grasp and wrong arm/hand movement patterns for writing, and can lead to frustration.

Hand Developmental Milestones:

Just as a child goes through developmental milestones for gross motor skills, a similar progression of developmental skills occurs in the hand. In preparation for writing, the hand should go through the following motor milestones:

1. Development of arches in hand: This is the concave surface of the palm that allows it to shape itself around objects
2. Development of wrist extension that supports skilled finger movements. Try picking up a penny with your wrist fully flexed and you can feel the importance of extending your wrist for finger use.
3. Development of an awareness of the "skill" side of the hand: This is using the thumb, index and middle fingers for manipulating fine motor items. (The other side of the hand provides stability and strength).
4. Development of an open index finger-thumb web space. I explain this to children by saying they need to make an "O" with their thumb and index fingers. Then I watch to make sure that they do the activities successfully by keeping all of these joints flexed. If the "O" collapses, they didn't do it right. If a child is unable to maintain this position, it may be due to poor muscle strength.
5. Development of skill in the small muscles contained in the hand. These movements are best developed in activities that use the thumb, index and middle fingers, such as threading a small bead (Myers, 1992).

What is developmentally appropriate for preschoolers?

One of the most crucial items that can be done for preschoolers is to provide vertical or inclined surfaces to work on. In this position, the wrist is properly positioned to develop stability and skillful use of the finger muscles. When working on a flat or horizontal surface, children tend to straighten or flex their wrists. This interferes with using the small muscles in the hand properly. Vertical surfaces also encourage the proper positioning of the arms and shoulders for work. Many activities can be adapted for use on a vertical surface by using book holders on a table, tabletop easels or regular floor easels. Here are a few items that can be easily used on a vertical surface:

- Stickers to make picture
- Colorform or reusable plastic “stickers”
- Felt boards or flannel boards for stories or making pictures
- Chalkboards using sidewalk chalk broken into 1-1/2 to 2 inch pieces that can be held with the thumb, index, and middle fingers. Be sure the “O” is maintained. Some children’s hands may be too weak for this activity. A small square of sponge dipped in water may be used for erasing the chalk marks. This is also held with on "O" or an open web space between the thumb and index finger
- Puzzles with thick pieces on a tabletop easel
- Magna-doodle. When using this on a vertical or inclined surface, put the “erase” lever at the top rather than the bottom. The magnetic pieces work especially well for promoting a pad-to-pad grasp of the thumb, index and middle fingers.

There are numerous other items that parents and teachers can use to facilitate fine motor development in preschoolers. The most successful items are the ones that children request on their own. Try to find activities that children find fun.

1. **Play dough:** Flatten the clay with hands on a table and poke small pegs or toothpicks into the clay. Cut with a plastic knife or dull pizza wheel. When cutting with a plastic knife, watch to make sure that the child’s index finger is placed on top of the knife.
2. **Newspaper:** Give children newspaper and show them how to tear it using their thumb, index and, middle fingers. After tearing it into strips, crumple the paper and use it to stuff a scarecrow, snowman or dinosaur. For example, a dinosaur can be made from two large pictures of dinosaurs stapled back to back and then stuffed by the children for a classroom hanging. Construction paper can also be torn into small pieces and glued onto a picture to make a collage.
3. **Spray bottles:** Use spray bottles filled with water to spray plants. Food color can be mixed into water and put in the spray bottle for “painting” snow. Children also enjoy using spray bottles to wash shaving cream off the inside of a sink. Spray bottles are great for developing strength to maintain the “open web space” between the thumb and index fingers. Be sure that a small sized spray bottle is used. To practice separating the two

sides of the hand, have the child use the index and middle fingers on the spray trigger; the ring and little fingers should be around the neck of the bottle.

4. **Tweezers or small tongs:** Over-sized tweezers, such as those found in the game “Bedbugs” by Milton Bradley, are good for developing opposition of the fingers. Also look in kitchen stores for small tongs. Strawberry hullers work well for little fingers in picking up small objects.
5. **Eye droppers:** These can be used at a water table in the classroom or in the bathtub or sink at home.
6. **Coins and buttons:** Watch to make sure that your child is using an “O” shape to grasp the coins or buttons. Practice inserting them into a slot cut in a yogurt container lid. Have the child practice picking up the coins with his or her fingers, instead of “raking” them off the edge of the table with his or her hand. When initially using a very small object with a three-year-old, please be sure the child does not have any inclination to put the object in his or her mouth
7. **Finger Puppets:** For story time, use finger puppets on the index or middle fingers, keeping the ring and little fingers tucked into the hand.
8. **Tomy Waterfuls games:** These are the water games in which a button on the bottom is depressed to cause motion of the water in the water tank on top to move small objects toward the targets. When playing these games, be sure the child is flexing or rounding the thumb.

Specific Recommendations Based on Age:

Three-Year Olds:

In general, three-year-olds should use a vertical surface for activities on a daily basis.

- Instead of markers and crayons children should use preschool crayons on a vertical surface. These are the short, round crayons with the hollow center. To prevent children from putting their index finger inside the hole of the crayon (which tends to collapse the web space) cotton can be stuffed inside the holes.
- Another good alternative is the Scrollie Animal Markers by Crayon Factory.
- Some children can use “sidewalk chalk” broken into 2" pieces and held by their thumb, index and middle fingers. Children should be checked to see if they have the strength to maintain an open web space or the “O.”

All three of the above alternatives help to support an open web space between the thumb and index fingers as the hand strength/skill is developing. For children that have a solid tripod grasp, primary sized markers are appropriate.

Four-Year Olds:

All suggestions presented above for three-year-olds are appropriate for four-year-olds. Following are additional activities for four-year-olds.

- Scissors activities can begin. Children need to be taught to hold the scissors correctly from the first moment they use them (thumb and middle fingers in the loops with the index finger placed under the bottom to stabilize and help direct the hand).
- Crayons are appropriate for children with strong, developed hands. Children with weak hands perform better with the larger diameter crayons and markers. For very weak hands, the short, round animal (Scrollie) markers work best. These markers support the open web space between the thumb and index fingers. A child's grasp should be frequently monitored to make sure an appropriate grasp is being used; that is, having all the thumb and index joints flexed with an open web space. If the child has difficulties with maintaining a tripod or quadrupod (four fingers touching the pencil with an open web space) grasp, drop back to using preschool crayons or primary sized markers and do more fine motor activities to strengthen the thumb, index and middle fingers (Myers, 1992).

The activities given above are general in nature. If children continue to have difficulty with these activities after practice, they would benefit from an occupational therapy evaluation to determine which specific skills are lacking.

References

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