

Improving your Child's Hand Skills Using Vertical Surfaces

By Valerie Pieraccini OTR

As parents we often spend a lot of energy trying to provide the best for our kids. Sometimes this means spending endless hours carting them to lessons or therapy sessions or helping them with schoolwork. Usually it means spending money. All you have to do is look at your bank statement after your child's birthday or the holidays to know that.

So you may be happy to learn that there is a way to provide the best for your child's hand skills without spending a lot of time or money. All you have to do is simply put as many of your child's activities on a vertical surface as you can. Vertical surfaces can make an average activity into a great activity for developing hand skills. The good news is that vertical surfaces can be found anywhere. A vertical surface is just any surface that is perpendicular to the floor like a window, a tree, a refrigerator, a tub wall, or a mirror.

Why are activities so much better on vertical surfaces? First of all, they motivate your child to be upright. With an activity on a vertical surface, your child must sit more upright while working on their hand skills. Your child will not be slouch in her chair nor will she be able to prop herself up on an arm because she won't be able to reach the activity. Activities on vertical surfaces are also naturally great for children who need to spend time in a stander. They encourage head control because the child will have to look up to see the activity. Another perk is that your child's working surface is always the right height! You don't have to ever worry that the table is too short or too tall.

Using vertical surfaces strengthens shoulder and arm muscles, as your child's arm must move against the pull of gravity in this position as she lifts her arms to reach for the activity. Vertical surfaces also place your child's hand in the best position to develop wrist strength and stability. The vertical surface will require your child to extend the wrist back. An extended wrist is the position used for most mature grasps like those used during handwriting. When the wrist is extended while playing on a vertical surface, your child's thumb is encouraged to move out of the palm of the hand. Once the thumb is out, it can move in an opposing manner with the other fingers for precise handling of small or medium objects, like a pencil or paint brush. This position also allows the hand to have a balanced use of the hand's intrinsic muscles. The intrinsic muscles of the hand are the small muscles responsible for the fine, skillful movements used in writing and cutting tasks. When playing on a horizontal surface like a table, children will often place their wrists in a bent position. When your child bends her wrist forward, it does not allow for skillful use of these small hand muscles.

Vertical surfaces also help children coordinate their eyes with their hand movements, a skill known as eye-hand coordination. By having an activity on a vertical plane, the activity is placed right in front of your child's eyes. Vertical surfaces are often large like

a chalkboard on the wall or an easel on the table so it tends to keep the child from seeing anything that might distract them in the room. The exception to this is windows and mirrors. Vertical surfaces also allow the child to see what they are doing as a child's hand is underneath the object they are holding. So if your child is writing with chalk on a chalkboard, her hand rarely blocks her view of the letters. Your child also receives increased feedback from her hands when writing on vertical surfaces, as she has to press harder with the chalk. The advantage of vertical surfaces is also that up is up and down is down, which helps a child with the relationships of lines on a paper. When writing on a horizontal surface, a child moves her arm backward to draw a line down and moves her arm forward to draw a line up which may be confusing to a child who is first learning to form letters.

Another benefit of using a vertical surface is that it provides a great opportunity to work on your child's coordinated use of both hands, otherwise known as bilateral coordination. If your child needs to learn to use one hand to stabilize an object while the other hand is active, just put the activity up on a vertical surface. If your child is drawing, she will have to hold the paper so it will not fall to the floor.

So how do you put activities on vertical surfaces? It's true that easels are great to have. They often come with a chalkboard or dry erase board, which is nice. Many products like Lite Brite® incorporate easels into their design too. When choosing an easel, you can choose from a freestanding easel or one that can be placed on a table. There are pros and cons with either style. You have to worry about the height of the table if you have the table easel. However, the tabletop easels can be reclined for the use of puzzles so the pieces don't fall off. The tabletop easels also are often cheaper and more easily stored in a closet than the freestanding easel. Yet, you don't have to buy an easel to put activities on a vertical surface. Your home probably already has a tub, a refrigerator, a window, mirrors or a few trees nearby so in essence, you've already purchased your vertical surfaces.

Let's start with using the walls of your tub. Children love playing with shaving cream during bath time. It's an excellent time to practice shapes or letters. The activity doesn't take a lot of fine motor coordination either. If you have white tub walls, you might consider adding color to your shaving cream for contrast or using tub finger paints. You won't need a paint shirt and clean up will be easy. Mirrors and windows are great for children to play with color forms. They seem to have color forms for every season or holiday available. Both are also great for suction toys. Suction balls are fun to roll up and down the surfaces, especially for children who have not developed control of the small movements of their hands. Magnetic letters or shapes can be used on mirrors or refrigerator doors. Mirrors by sinks and outdoor windows can also be used for playing with shaving cream or paint, as the mess can still be relatively easy to clean up. Clean up can also be a great activity for vertical surfaces too. Don't hesitate to incorporate a sponge and a towel with some water to wrap up the activity. If you are outside, allow your child to "paint" with the water using paintbrushes on trees or walls. Many parents may hesitate to encourage their young children to color or paint on inside walls even with paper over the surface. However, there are many activities that you can provide that you

won't have to worry whether your child stays on the paper. Even young children love to put stickers on calendars to mark the date. Flannel boards are also a favorite of children.

So you can probably see that it's a matter of only looking at your child's environment in a slightly different way. With very little effort, you will probably see vertical surfaces all around you to include into your child's play. Don't you wish the rest of parenting could be so easy?

For more information on vertical planes, visit Handprints' website at www.eHandprints.com. or check out "Writing On The Wall" in *Handprints: Home Programs for Hand Skills* by Valerie Pieraccini OTR and Darla Vance MS OTR.