



# Writing Adaptations

If a child has trouble using traditional writing implements (pencil, pen, crayon, or fine-line marker), try the following:

- primary (thick) pencils or preschool crayons: available from Lakeshore Learning Materials
- thick-line markers (easier to grasp and requires less pressure)
- foam or rubber pencil grips: available from Sammons, Flaghouse and office supply stores
- a tennis ball with a hole into which a pencil, pen, or marker can be inserted
- a built-up writing implement - using tape, foam rubber, folded paper towels or Dyna-Form-It® putty from Sammons or Flaghouse to wrap around it.
- commercial hand splints: available from Sammons, Flaghouse, and other orthopedic product suppliers
- handmade hand and arm splints, including an arm splint on rollers, for easier movement: consult an occupational therapist for design and construction
- a headstick, chinstick, or mouthstick with a writing implement: available from Sammons, Flaghouse, and other orthopedic product suppliers
- weighted or curved pens, or pencils on stabilizing bases: available from Sammons, Flaghouse, and other orthopedic product suppliers
- a slant board or easel - experiment with these versus writing on a flat surface: available from Sammons, Flaghouse, Lakeshore Learning Materials, or Toys R Us; Fisher-Price makes the 3-IN-1 CREATIVITY TABLE and EASEL DESK; Crayola makes the PORTABLE TABLETOP EASEL and SUPER DESK; little tikes makes the DOUBLE EASEL and CREATIVE ACTIVITIES FLOOR STUDIO
- paper that is taped to the writing surface or held in place using magnets or a clipboard so it doesn't shift; removable tacky substances for hanging posters works well, too: all are available from hardware and office supply stores
- different sitting and standing positions to obtain optimum control

If a child can't use a writing implement with the above adaptations, try the following:

- use rubber stamps with whole words (such as the child's name) or individual letters, depending on the child's cognitive and physical functioning: available from Lakeshore Learning Materials
- use a computer, typewriter, or word processor by hand, headstick, chinstick, mouthstick or switch: available from Sammons, Don Johnston Incorporated, and other adaptive equipment suppliers



# Drawing & Tracing Adaptations

Please refer to "Writing Adaptations" for ideas on how best to help the child hold the pencil, pen, crayon, or marker. Then try the following:

- use tape, magnets, clamps, or a clipboard with the stencil, template, or paper to provide stability
- experiment with both a stencil (the child traces the inside edge of the cutout design) and template (the child traces the outside edge of the cutout design)
- mark the edge of the stencil or template with a thick black line for greater visual contrast
- thicken the edges of a stencil or template with a line of colored glue
- cut the stencils or templates from materials that are thicker than oaktag, such as thin styrofoam meat trays or cardboard
- enlarge stencils on a photocopy machine, or use plastic SUPER STENCILS from Lakeshore Learning Materials
- use cookie cutters, puzzle pieces, blocks, cans, and other thick objects to trace around if the child can't draw free-hand, or has trouble using stencils
- improve visual contrast by drawing or tracing on a light box such as the ZOOM TRACER DESK by Fisher-Price, LIGHT UP PICTURE MAKER by Playskool, and CREATIVE ART STUDIO and SUPER GLOW LIGHT DESK by little tikes.

If a child can't draw or trace with the above adaptations, try the following:

- use rubber stamps with the desired designs and shapes
- use sponges, potatoes, or cookie cutters with the desired designs and shapes as stamps
- use stickers or precut paper shapes and designs
- make your own stickers by drawing on labels
- use a computer graphics program by hand, headstick, chinstick, mouthstick or switch: available from Sammons, Don Johnston Incorporated, and other adaptive equipment suppliers



# Painting Adaptations #1

If a child has trouble using a regular artist's paintbrush, try the following:

- use a paintbrush with a thick handle, such as BEST-BUY BEGINNER'S BRUSHES from Lakeshore Learning Materials
- insert the brush handle through a hole in a tennis ball
- slip foam or rubber pencil grips over the handle of the paintbrush
- build up the handle by taping or rubber-banding foam rubber or folded paper towels around it or by using Dyna-Form-It® putty from Sammons or adaptAbility
- use a foam brush: available in various widths from craft and paint stores and Lakeshore Learning Materials
- rubber-band a piece of sponge to the end of a thick dowel
- try easy grip toothbrushes from Kindertools
- provide stability of painting materials by screwing plastic cups to a wooden board to hold the paint, or use BEST-BUY NO-SPILL PAINT CUPS and PAINT CADDY: available from Lakeshore Learning Materials
- use commercial or handmade splints: available from Sammons, Flaghouse, other orthopedic product suppliers, or occupational therapists
- use a paintbrush with a headstick, chinstick, or mouthstick: available from Sammons, Flaghouse, and other orthopedic product suppliers
- attach the paintbrush to the child's palm by looping a stretchy chenille pony-tail holder around one end of the brush, over the back of the child's hand, then around the other end of the brush
- use tape, tacks, magnets, clamps, or a clipboard on the paper, stencil, or template to provide stability
- give the child a stencil or template so he/she can paint the desired design or shape while protecting other areas from paint
- glue yarn or thick, colored glue around the edges of the design to form visual and tactile boundaries
- try the child in different sitting and standing positions, including appropriate support at the shoulders, elbows, and wrists, for optimum control



## Painting Adaptations #2

If a child can't use a paintbrush with the previous adaptations, try the following:

- use small paint rollers instead of brushes
- use sponges, potatoes, or styrofoam stamps cut in the desired design or shape, such as those in the LAKESHORE SPONGE PAINTING CENTER from Lakeshore Learning Materials
- use rubber stamps with the desired designs and shapes
- use sturdy plastic stencils, such as I CAN DRAW! STENCIL SET from Crayola, FUN ART STENCIL BOOK from Fisher Price, and CARRY ALONG STENCILS and STENCIL-A-CARD SET from little tikes
- use cookie cutters with the desired designs and shapes
- use stickers or precut paper shapes and designs or make your own stickers by drawing on labels
- put paint in a spray bottle or water pistol if the child can operate the trigger mechanism
- put paint in an empty roll-on deodorant bottle, adapting the grip as needed
- use refillable TEMPERA MARKERS with a no-spill, easy-flow applicator: from Lakeshore Learning Materials
- use DOT ART MARKERS: from Lakeshore Learning Materials
- use the SQUEEZE AND PAINT STENCIL ART KIT, if the child can squeeze a bulb: from Lakeshore Learning Materials
- put paint in a rubber bulb syringe from the baby department of toy and drug stores
- put paint in a motorized water pistol, artist's airbrush, or WaterPik which the child can operate with a switch
- use a computer graphics program by hand, headstick, chinstick, mouthstick or switch: available from Sammons, Don Johnston Incorporated, and other adaptive equipment suppliers



# Sponge Painting Adaptations

If a child can't use a paintbrush or a regular sponge for painting, try the following:

- have the child wear a sponge bath mitt dipped in paint
- make a mitt from a sock or glove; put Velcro® on the palm or other part of the mitt over which the child has the best control, then attach the sponge to the mitt
- use squeeze-type clothespins to hold the sponge
- use a thick, chunky sponge (such as used for washing the car), trimming to fit the child's hand
- use a wide rubber band or stretchy chenille pony-tail holder to fasten a sponge to the child's palm
- use a waterproof glue to fasten a piece of sponge to a can, block, or jar lid to make a handle
- fill the handle of a sponge-tipped pot scrubber with paint: available in the housewares department of most grocery, hardware, and discount stores
- use a scrubbing sponge from the housewares department of a grocery, hardware, or discount store; this type of sponge is flat and coarse, and is glued to a plastic handle
- put paint in small sponge-topped plastic bottles designed for moistening postage stamps: these are available at office supply stores
- use the EASY GRIP SPONGE and ALPHABET SPONGE PAINTING SETS: from Lakeshore Learning Materials
- try the CRAZY PAINTING SET of sponges and rollers by Crayola



# Chalk Adaptations

If a child has trouble using chalk, try some of the ideas listed under "Writing Adaptations," or try the following:

- SUPER CHALK WRITER by Cadaco - has a long handle to allow children in wheelchairs or walkers to draw on the sidewalk
- SUPER STAMP CHALK by Cadaco - turn over small can to make a design with chalk powder
- SUPER SPRAY CHALK by Cadaco - squeeze the trigger on a spray bottle
- ROLLING CHALK WRITER by Fisher Price - has long handle with rolling wheel to allow children in walkers or wheelchairs to draw on the sidewalk

# **Finger Painting Adaptations**

If a child has difficulty isolating a single finger for painting, try the following:

- cut a hole in a sock for one finger to fit through
- wrap an ace bandage around the middle, ring, and pinky fingers to keep them bent and out of the way so the index finger can be extended
- have an occupational therapist make a splint to provide appropriate hand and wrist support
- experiment with different sitting and standing positions, including supports at the shoulders, elbows, and forearms as needed, for maximum control
- use a slant board or easel instead of a flat painting surface
- use knuckles, palms, or feet instead of fingers
- use a headstick, chinstick, or mouthstick with a sponge tip
- squirt paint onto paper fastened to a SPIN-ART, lazy Susan, or old phonograph; the child may be able to spin the lazy Susan by hand or could use a switch to operate the SPIN-ART or phonograph
- put blobs of paint and marbles on paper which is inside a cake pan or box or BED BUGS game; the child either shakes the cake pan or box, or uses a switch to vibrate the BED BUGS game so the marbles can make interesting designs
- put blobs of paint on paper and let the child drive a chunky toy truck or roll a rubber ball across it
- put blobs of paint on paper and have the child blow the paint with a straw or by squeezing a baster or bulb syringe (water down the paint as needed)
- try the WILD AND WACKY PAINTER, rolling paint wheels and stamps with paint and a desktop: from Toys R Us
- use a graphics program on the computer with a mouse, joystick, TouchWindow, drawing tablet, or switches: available from Don Johnston Incorporated



## Stirring Adaptations

If a child cannot stir with a spoon, try the following:

- use a bent, long, or weighted spoon, or spoon with an adapted grip: available from Sammons, Flaghouse, Kindertools, and other orthopedic product suppliers
- build up the handle of a spoon with foam rubber or Dyna-Form-It® putty: available from Sammons, Flaghouse, and other orthopedic product suppliers
- use a commercially available hand splint or utensil grip, or have an occupational therapist design and construct one to meet the child's needs
- use a scoop bowl or bowl with steep sides
- place the bowl on a non-stick material such as Dycem, a thin sheet of foam rubber, a spongy vinyl placemat, a static, non-skid mat for office equipment or drawer liners, a wet washcloth, a bath mat cut to the appropriate size, or a suction cup soap holder
- use a headstick, chinstick, or mouthstick: available from Sammons and other orthopedic product suppliers
- put the materials to be stirred in a zip-top plastic bag and let the child knead it with hands or feet, or by using a rolling pin or paint roller
- put materials to be stirred in a plastic container with a lid for the child to shake or roll
- put the materials to be stirred in a blender or food processor that the child can operate with a switch
- put the materials to be stirred in a manual blender or mini-food processor that operates by pushing down on the top or turning a crank, such as the SMART CHOPPER from Harriet Carter
- let the child use a hand-held electric mixer, using a switch as needed



## Spreading Adaptations

If a child cannot spread with a knife, try the following:

- use a weighted knife, or knife with an adapted grip: available from Sammons, Flaghouse, and other orthopedic product suppliers
- build up the handle of a knife with foam rubber or Dyna-Form-It® putty: available from Sammons, Flaghouse, and other orthopedic product suppliers
- use a commercially available hand splint, or have an occupational therapist design and construct one to meet the child's needs
- spread with a spoon, sponge, brush, or finger (see "Painting Adaptations")
- place item to be spread on a plate, tray with sides, or spread board from adaptAbility



## Grasp Adaptations

Some projects require the child to pick up, place, or crumple materials. If a child has limited strength or movement in his/her hand, try the following:

- wrap a loop of wide masking tape, sticky-side out, around a child's palm or fingers
- sew or glue Velcro® patches or magnets on the palm or fingers of an old glove; put corresponding patches on toys, utensils, or other objects that the child wants to pick up and hold on to
- use a regular, curved, or adapted grip spoon or ladle for scooping up and dumping out small items: available from Sammons, Flaghouse, and other orthopedic products suppliers
- use a scoop, cup, or can for scooping up and dumping out small items; add foam rubber or Velcro® to improve grasp if needed
- use a reacher tool from Sammons, adaptAbility, and other orthopedic product suppliers
- use commercially available hand splints, such as those from Sammons, Flaghouse, and other orthopedic product suppliers, or have an occupational therapist design and construct a custom splint
- put Stick-Tac™ or similar substance, available in hardware and office supply stores, or a loop of masking or duct tape, sticky-side out, on the bottom of a chunky block or can which the child can use to pick up the desired item
- try using the child's bare feet to pick up and place items or crumple paper
- use a headstick, chinstick, or mouthstick with tape on the end
- try having the child suck into a straw to lift and place items that are LARGER than the diameter of the straw
- use a PUZZLE PICK UP, foam covered dowel with suction-cup end from adaptAbility or a soap gripper (a suction cup with a ring attached to fit a finger) from Sammons
- put small pieces in scoop bowls, egg cartons, or muffin tins, or in bowls with suction cup bases, on a lazy Susan if needed, for easier access



## Sprinkling Adaptations

Some projects require the child to sprinkle glitter, rice, seeds, etc. If a child can't pinch and sprinkle these by hand, try the following:

- use a regular, curved, or adapted grip spoon or ladle for scooping sprinkling small items: available from Sammons, Flaghouse and other orthopedic products suppliers
- use a scoop, cup, or can for scooping and sprinkling small items; add foam rubber or Velcro® to improve grasp if needed
- put the items to be sprinkled in a shaker-top container: various sizes are found in the housewares department of discount stores, or use empty spice or powder containers



# Cutting Adaptations

If a child is unable to use regular scissors, try the following:

- regular scissors with finger grips of different sizes and shapes
- training scissors, with holes for both the child and adult
- finger grips lined with foam rubber or mole skin for a more snug and stable fit
- spring-loaded self-opening scissors, also known as loop scissors: available from Sammons and other orthopedic product suppliers
- tabletop spring scissors which require a fingertip or palm "push-down" motion on a stable, flat handle and base: available from Sammons and other orthopedic product suppliers
- rolling scissors which are pushed across the cutting surface: available from adaptAbility
- personal paper cutter, a small paper cutter with a sliding, recessed blade: available from Calloway House, Inc.
- battery operated scissors, which can be used with a switch: available from Sammons and AbleNet
- electric scissors, which can be used with a control unit and a switch: available from fabric and craft stores
- C-clamp tabletop spring scissors or loop scissor to a tabletop or screw into a piece of wood for more stability or different angle

If a child is unable to use a regular knife, try the following:

- a pizza cutter with or without a built-up handle
- a regular knife with a built up handle - using foam rubber or Dyna-Form-It® putty: available from Sammons, Flaghouse, and other orthopedic product suppliers
- a weighted knife or knife with a thick handle: available from Sammons, Flaghouse, and other orthopedic product suppliers
- a knife with a curved handle or blade or adapted grip: available from Sammons, Flaghouse, and other orthopedic product suppliers
- commercial hand splints designed for holding eating utensils: available from Sammons, Flaghouse, and other orthopedic product suppliers
- handmade splints designed and created by an occupational therapist



# Gluing Adaptations

If a child has trouble applying glue, try the following:

- use a paintbrush (see "Paint Brush Adaptations" for ways to facilitate use)
- use a sponge (see "Sponge Painting Adaptations" for ways to facilitate use)
- use fingers (see "Finger Painting Adaptations" for ways to facilitate use)
- use a glue stick; wrap the stick in foam rubber for a better grip, if needed
- use a glue stick with a headstick, chinstick, or mouthstick; available from Sammons and other orthopedic product suppliers
- pry the ball out of an empty roll-on deodorant bottle, fill the bottle with glue, and replace the ball; wrap the bottle with foam rubber for a better grip, if needed
- use SUPER SAFE ROLL-ON GLUE bottles from Lakeshore Learning Materials
- apply double-faced tape or clear Con-Tact® paper, sticky-side up, instead of glue, so the child just has to drop the paper, glitter, or other items onto the already sticky surface
- use a marker or bright highlighter to make lines or dots to help a child see where the glue should go



# Folding Adaptations

If a child has trouble folding paper, try the following:

- use a marker to put dots on the corners of the paper to help the child align the paper for folding
- use tape, tacks, magnets, or clamps to stabilize one half of the paper as the child folds the other half up to meet it
- use the palm, side of the hand, or forearm to crease the paper
- roll a can, rolling pin, or brayer to crease the paper
- crease or score paper or oaktag for the child, then open it so he or she can fold it successfully
- place a ruler where the paper is to be folded to use as a guide



# Stamping Adaptations

If a child has trouble using stamps or cookie cutters, try the following:

- glue the sponge, rubber stamp, or cookie cutter to the bottom of a can, thick dowel, or block for easier grasp
- use rubber or sponge stamps on a roller: available from Lakeshore Learning Materials
- use EASY-GRIP SPONGE STAMPS: available from Lakeshore Learning Materials
- try commercially-made hand splints from Sammons, Flaghouse, and other orthopedic product suppliers
- try handmade splints, designed and constructed by an occupational therapist
- insert a fork, with or without adaptations or splint, into a fruit or vegetable that is being used as a stamp

If a child can't use stamps with the above adaptations, try the following:

- use stencils in the shape or design of the stamp; the child can paint by hand, brush, roller, or airbrush and switch
- use precut paper shapes and designs which the child can glue onto the project
- make your own stickers on address labels
- use commercially-made stickers



# Pouring Adaptations

If a child has difficulty pouring, try the following:

- put the material to be poured in a measuring cup or small pitcher with a spout and handle
- put the material to be poured in a squeeze bottle
- put dry material in a shaker-top container
- try cups or containers of various sizes for best grip, including a child's sip cup with or without handles
- use a spoon, ladle, or scoop with or without hand splints
- use a Pour Toy and switch: available from Toys for Exceptional Children

## **Tying Adaptations**

If a child has trouble lacing a string or yarn through holes, try the following:

- enlarge the holes
- use a marker to outline the holes for better visual contrast
- dip the ends of the string or yarn in wax or white glue and let dry to stiffen the ends
- wrap the ends with tape to stiffen them
- use WIKKI STIX from Funtastic Learning
- place yarn or string through a large plastic sewing needle, found in craft stores
- experiment with positioning; a child may do better with an up-down, down-up, or side-to-side motion

## **Stapling Adaptations**

If a child has trouble operating a regular stapler, try the following:

- hot-glue a wooden or plastic square to the top of the stapler to give the child a larger surface to press
- use an electric stapler, available from office supply stores
- use an electric stapler with a switch
- anchor the stapler in a sturdy box lid or next to a wall or other lateral support which can be used as a guide for the edge and/or top of the paper to be stapled
- use a marker or highlighter to mark where the staple should go

## **Shaking Adaptations**

If a child has trouble shaking an item, try the following:

- let the child roll the container with hands or feet
- put the ingredients in a zip-top plastic bag and let the child knead the ingredients with hands or feet, or with a rolling pin or paint roller
- see "Stirring Adaptations" for other shaking-to-mix alternatives
- see "Sprinkling Adaptations" for other shaking-to-sprinkle alternatives

# Vision Adaptations

To help a child with low vision, try the following:

- remove all distractions from the work area
- position the child so he or she is not working in shadow (light source should be overhead and in front of the child)
- use clamp-on or gooseneck spotlights on the work surface
- use a light box for drawing, tracing, and writing, such as the ZOOM TRACER DESK by Fisher-Price, LIGHT-UP PICTURE MAKER by Playskool, and CREATIVE ART STUDIO by little tykes
- place light-colored materials on a dark-colored work surface, and vice versa to provide maximum visual contrast
- use a marker to make all lines thicker and darker
- apply thick yarn or a line of colored glue around areas to be colored, painted, traced, cut, or glued to provide greater visual contrast as well as a tactile border
- enlarge the patterns on a photocopy machine, or use GIANT SUPER STENCILS from Lakeshore Learning Materials
- add sand, salt, or coffee grounds to fingerpaint and glue for tactile feedback
- use RAINBOW FOAM PAINT (texture of shaving cream) from Funtastic Learning
- provide precut paper, sandpaper, or other tactile shapes, facial features, etc., for art projects instead of having the child paint or draw them
- organize materials, paints, etc., for the project on divided plates or trays, and be consistent in the placement from one project to the next
- include Braille or other tactile information on materials used in the project



# Switch Adaptations

If a child cannot use a manually-operated implement or device, he or she may be able to perform the task using an electric- or battery-powered device, switch, and interface. Since the subject of switch use could fill a book in itself, what follows is a very brief overview to acquaint the reader with switch basics. For more information, please refer to the excellent, comprehensive guides to switch use listed in the Resources: Books section of the Appendix. Catalogs with switches, interfaces, and adaptive devices are listed in Resources: Adaptive, Educational, and Recreational Materials.

## Switches:

Switches come in a wide variety of sizes and types to accommodate the needs and abilities of the switch user. The switch serves as a means to operate a battery-powered or electrical device for people who can't operate them in the traditional manner due to severe physical impairments such as cerebral palsy, ALS, muscular dystrophy, paralysis, and limb deformities or amputation. Selection and placement of a switch is critical to success with a switch and should be determined through an evaluation by a team of professionals with expertise in this area, specifically a speech-language therapist, occupational therapist, physical therapist, and/or assistive technology specialist.

### battery-powered devices

A switch can be connected to any battery-powered device via a battery device adaptor or battery-interrupter. A switch can also be connected directly to a battery-powered device that has been specially adapted for this purpose. Children with disabilities can use a switch to operate a tape player for games of Musical Chairs or Hot Potato; to activate battery-powered scissors if they can't cut for themselves; to dry the dishes or art projects with a personal fan; to make art projects with a Spin-Art spinner; to activate a buzzer to call for attention; to activate loop-tapes to play games like Hot or Cold? or Red Light/Green Light, or to give the repeated line in a story; to activate a battery-powered toothbrush during grooming; and to operate all kinds of toys and games, including battery-powered water pistols.

### electrically-powered devices

A switch can be connected to any electrically-powered device through the use of a control unit. **NEVER CONNECT A SWITCH TO AN ELECTRIC DEVICE WITHOUT A CONTROL UNIT.** A student with disabilities can use a switch and control unit to operate kitchen appliances such as a blender or food processor, hand mixer, and popcorn popper; to operate an electric fan or hair dryer to dry dishes or art projects; to play an electric tape player or radio for enjoyment or for party games; to activate a lighted mirror and hair dryer during grooming activities; and to operate a film strip projector for the class. Switches can also enable children to access a computer via an appropriate interface (see below).

Some switches, such as the BIGmack™ switch from AbleNet, Inc., allow you to record a message right into the switch, as well as operate other devices. These "talking switches" can be used instead of loop-tapes, described on the following page.



## More Switch Adaptations

### **Loop-tape:**

A loop-tape is simply a cassette tape that is about 15 seconds in length which would normally be used in your answering machine to give an outgoing message. Available at Radio Shack, these continuously playing tapes are ideal for short messages, for example: "I need help over here" or "I want some more." They can also be used for giving the repeated line in a book, such as "I do not like them, Sam I Am!" or "Who's that tramping on my bridge?" Two switches, tape players, and loop-tapes could be used for two lines of a story or two phrases in a game, such as Hot or Cold? and Red Light/Green Light. Loop-tapes would be useful to children with speech impairments who don't have a communication device. Record the short message three or four times on a single loop tape so that the message will be spoken as soon as the switch is hit.

### **Computer interfaces and alternate inputs:**

Switches can be connected to the computer via Ke:nx, Macintosh Switch Interface, and other adaptors. Alternate inputs allow people with disabilities to use the functions of a keyboard or mouse and to otherwise activate the computer without using standard input methods. There are many alternate inputs to meet a wide variety of needs, including: PowerPad, TouchWindow, Unicorn Board, Intellikeys, HeadMouse, trackballs, and joysticks.

Please refer to the Resources: Computer Software and Adaptations section in the Appendix for books and catalogs which contained detailed information about the selection and implementation of these devices.