While working in the classroom with orthopedically handicapped and multihandicapped pre-school children, the need arose for a piece of equipment that would permit a child to work with tactile stimulation activities as independently as possible while also freeing the teacher and aide to move about and work with several children simultaneously instead of being restricted to a one-to-one situation.


A lap tray with a removable recessed pan in the center was designed and used on each child's individually modified wheelchair during various tactile activities. In addition to successfully meeting the needs of the children and teachers, the recessed pan tray offered other benefits. It promoted and encouraged bimanual activity, hands in midline, grasp and release, eye-hand coordination, and forward extension and reach of arms. Also, it increased tactile sensation and discrimination of a variety of shapes and textures. For blind children, the metal pan also provided necessary auditory and tactile feedback for experience in working within limits of a container.

Parents use the tray in self-feeding training, either by placing finger food in the pan or putting the dish in the pan to prevent it from sliding and to encourage finding the location of utensils and food.

Materials and Directions

Materials needed are: 18 x 21-inch sheet of ¼-inch plywood (for child-sized wheelchair); 22.5-cm (9-inch) square metal cake pan, 5 cm (2 inches) deep with lip around edges; and 4 feet of rope.

The wheelchairs were measured for appropriate tray size, and plywood was cut according to measurements. A 22.5-cm (9-inch) square was cut out in the center of each tray to accommodate the cake pan. One hole was drilled in each of the rear arms of the tray, and a rope was attached at each hole to allow the tray to be tied at the back of the wheelchair. Trays were sanded and varnished. The lip on the cake pan prevents it from falling through the open square.

A variety of tactiley stimulating materials can be put into the pan such as sand, macaroni, finger paint, blocks, water, or clay and when activities are completed, the pan is simply removed from the tray, emptied, and cleaned.

Acknowledgment

James McCowen constructed the tray.