

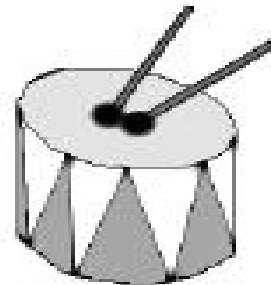
Sample Activity

Sounds Around Me

A simple software program about sounds such as *Switch Intro* can be used as a means to learn more about the sounds in a child's environment. Combining the program's visual and auditory feedback with off-computer materials, such as books and toys, encourages children to explore both familiar and novel sounds. Including signing and adaptations in equipment and materials ensures that each child participates in the activities.

Teacher's Role

The teacher's role is to provide children with many opportunities to be aware of sound, to hear sounds in their environment, and to make their own sounds. Sounds are a natural part of a child's environment. Since hearing is one of the five senses, children learn about their world through sounds around them. "Make It Sound" is a program component of the *Switch Intro* software program which presents children with a variety of sounds and pictures.



This program can be used to design activities for very young children. Children control repeating the sound or changing to a new sound by pressing a switch. Combine off-computer materials, such as sound-making toys, a picture book, and recorded sounds, to develop a multitude of activities around this simple program.

Outcomes

When participating in this activity, children will . . .

- Become aware of sounds in their environment. They will become aware that they are causing the sound when they press the switch.
- Explore making sounds by pressing a switch. They will explore familiar and novel sounds.
- Listen to and compare favorite sounds with those that are less familiar. They will make choices to repeat favorite sounds as often as they like.
- Control and repeat sounds or change to a new sound. They will make the cognitive connection between image, sound, and toy prop. They will use their new knowledge of sounds around them to relate to their world.

Materials Needed

- Macintosh computer with color monitor (4 MB RAM with System 7.0 or 2 MB RAM with System 6.07/6.08)
- *Switch Intro*—”Make It Sound”
- Macintosh Switch Interface
- Switch
- Switch holder (optional)
- Toy props such as a music box, drum, saw, hammer, telephone, bird, watch, guitar, and/or motorbike

Preparing the Environment

To limit distractions, cover the pieces of equipment that the child is not using. Position the monitor on a low table with the keyboard out of the child’s view. Place a suitable switch in a stable position on the table in front of the monitor (or on the child’s wheelchair tray). Have the group of toy objects within easy reach to use during the activity.

Open the program, *Switch Intro*, and select “Settings.” Set the switch input for one switch use and set other options appropriately. Select “Make It Sound” from the picture menu.

Procedure

Encourage children to explore the switch and press it to hear a sound. Talk about what the sound is and how it relates to the picture on the monitor. Offer the toy that makes a similar sound. Design the activity to be exploratory so that children can play with the toy and press the switch to hear the sound as often as they want.

Ask children how to make the sound from the computer again. Observe switch pressing behavior to assess the child’s awareness of cause and effect. When the child seems to tire of one object, ask him if he wants another picture or sound. To change to a new picture and sound, press the number 3 on the keyboard. Repeat the activity, offering corresponding toys to the pictures on the monitor. If a child is hesitant to press the switch, provide physical assistance or model switch pressing for him.

Related Activities

Assemble a group of toy objects similar to those which appear as pictures in the program. Design activities around the objects, focusing on the sounds which they produce. Talk about the sounds, relating each sound to the object which produces the sound in the environment. Talk about similar sounds the children may hear at home. Encourage the children to imitate the sound.

A book can be made with pictures printed directly from the program. Each screen can be captured as a “Picture” by pressing Command-Shift-3. The captured image is saved as a “Picture” on the desktop. The picture must then be placed in a graphics program, such as *ClarisWorks*, to be printed. The picture book can be used with a group of children or on an individual basis in order to familiarize the children with the objects they will later see on the computer. A variety of activities can be designed around the toy objects and the picture book.

This activity can be designed for choice-making by selecting the “Two Switches” option in the program’s “Settings.” By pressing one switch, the child can hear the sound. With a press on the second switch, he can change to a new picture. In this way, a child controls which sound and picture he wants.

The “Two Switches” option can also be selected with the adult in control of the switch for the picture change and the child in control of the switch for the sound change. This arrangement ensures sufficient time on each picture to talk about the object and sound. Otherwise, especially with very young children, rapid switch pressing may defeat the purpose of the activity. Repeated picture and sound change resulting from rapid switch pressing does not allow sufficient time to focus attention on any one picture. Also with random switch pressing, the child may not understand the causality of the rapid changes on the monitor.

Talk about or create games with familiar sounds in a child’s environment, including the following:

- Self—Sounds the child can make, words the child can say, silly sounds the child can make, vocal imitations of familiar sounds
- Home—People at home who make sounds, animals or pets and their sounds, music from a tape recorder or radio, sounds unique to each room such as water running or a toilet flushing in the bathroom
- School or Program—Names of children and adults, songs sung by the children, musical instruments, children playing, sounds of toys, sounds from the computer programs
- Outside—Birds chirping, animals making sounds, insects making sounds, airplanes, wind blowing through trees, rain falling, cars/trucks going down the street, children running or walking, playground noises