

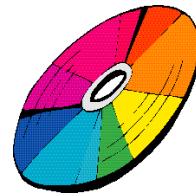
USING A SWITCH IN MIDDLE SCHOOL and...



Some students cannot use their hands for functional purposes either due to their physical limitations or their cognitive abilities. Switches can offer ways for students to partially participate and often increase their independence within parallel activities. For switch use to have the most meaning, it needs to occur within a **functional context** as part of a **routine** that the student does on a regular basis. The following are some ideas for school staff to consider with applications in the middle school and high school settings.

Art Class

- Use a mix master and switch to mix cookie dough, paper maché or play dough for art projects. Peers can mold play dough and cookie dough into thematic objects.
- Spin art/twirl-o-paint can be switch operated to make abstract designs for classmates. Choose the colors. AbleNet makes twirl-o-paint.
- Play background music with a switch operated tape recorder for classmates to do impressionistic painting. The student can play a short music segment while classmates paint what they visualize or how it makes them feel. Repeat with six different types of music. Use the Timed function on the Powerlink.
- Use a popcorn popper to make popcorn art projects.
- Make gifts using spin art or twirl-o-paint. For example, place mats, writing paper, background designs for gifts or special occasion cards, book covers, cardboard designs to cut out and shellac for brooches, earrings and refrigerator magnets.
- Illuminate a mirror for a face painting session.



Band Class

- The student could tape a portion of the band class and at their request replay their performance for them to critique.
- The student could play pre-recorded applause upon completion of a recital.

Computer Class

- Play interactive switch games with a partner to work on turn taking.
- Check out Priority Woods for free single switch cause/effect software for a variety of age groups and interests. (Google search)



Cooking Class

- Help prepare a snack by operating the blender or microwave.
- Operate a can opener, blender, mix master, coffee maker, food processor/chopper or a popcorn popper.

Jobs

- Help prepare lunch by operating the blender.
- Use a paper shredder to help the secretary shred school paper.
- Use an electric pencil sharpener to sharpen pencils for the secretary or the art teacher.
- Run an electric stapler with the AbleNet Powerlink.



Extra sensory stimulation can be added to jobs to increase the student's motivation to use the switch.

Here, our student is enjoying some music while operating the paper shredder as a job in her resource room.

Hopefully in time, the shredding job will become motivating in itself and music can be faded out.

Home

- Play the radio or recorded music using an AbleNet control unit and switch.
 - Turn on the TV and change channels using a TV/Video Control Unit from AbleNet.
- See the catalogue. Available through Insight Media in Surrey.
- Enjoy a leisure activity such as a massager.

(Refer to the movie clip MVI_0842.AVI for a demonstration of a high school student using a switch and Powerlink for music and vibration as a leisure activity.)

www.pisp.ca/strategies/MVI_0842.avi

Activities For The Resource Room

- Classmates with difficulties with written output, can read short writing assignments into a tape recorder. The student can use the switch to play it back to the .
- Play a piece of music, then classmates write or tell a story about the music.
- Use a switch-activated tape recorder using "Talking Books" from the public library.
- Plug a Language Master into one Powerlink outlet, and a tape player into the other.
- Use the All-Turn-It Spinner to select numbers, colours or words for games in the resource room, which reinforce functional academic skills for other resource room students.

Leisure Time with Peers

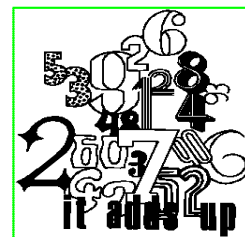
- Play games using an **All-Turn-It Spinner**: This tool is available from **Insight Media in Surrey. B.C. (604) 581-2420** or **AbleNet in the U.S.** It includes a "shake the dice" overlay. Additional accessory packages can be purchased, e.g., re-usable vinyl stickers for customizing an overlay, "Bowling" and "Golf" games. At its simplest level it can be used to make random choices in games. The overlays can be used to roll "1 dice" or "2 dice".
 - Students can be assigned different roles. One student could be the "spinner" for all the players. Another student could be the calculator and add the numbers when 2 dice are "rolled".
 - Students can work in partners.
 - Voice output could be added by plugging in a Bigamy or Step-by-Step. Use the sequences to say whose turn is next, to say encouraging phrases.
 - Run a battery operated card shuffler using a battery bypass device from Radio Shack and the AbleNet control unit. (This could be borrowed from PISP for trial.)
 - Operate a game spinner to make random selections with other students playing a game, for example, Twister. The disc could have the four colours of the game on it.
 - The student could select the colours for the next player.
- Use a battery interrupter with a battery operated dollar store fan converted into a spinner with a homemade grid designed to recreate the choices from a Twister Game.

(Refer to the video clip MVI_0919.AVI)

www.pisp.ca/strategies/MVI_0919.avi

Math

- Play a pre-recorded tape with math problems.
- Play a pre-recorded tape with answers to the day's math activity. Students can come to check their work.
- Switch activate a tape recorder with a pre-recorded tape with story problems



Music/Band

- Play a pre-recorded tape of an instrument for classmates to guess which instrument is playing.
- Play a recording of a bell chime along with other instruments being played.



Here, a student is vocalizing to indicate that she wants “more” music, when it is stopped.



This student is using her gaze to choose the instrument she wants to use.

PE

- Play a pre-recorded tape to control movement to music in a dance class.
- Play background music for warm ups or dramatic dance.
- Play a pre-recorded tape to give instructions or directions for students to follow for movement activities or games.
- Play pre-recorded tape with cheers during team sports.
- Announce the starting line-up or the start of a team game using a buzzer and Powerlink.

School Jobs

- Use a WaterPic to help water plants. Connect it to a control unit and switch. Peers could bring plants to the student. They could hold the wand while she presses the switch long enough to water the plant. The student may be able to hold the wand if the handle is enlarged.
- Use a can opener to remove lids from cans for recycling.
- Operate a paper shredder to make nesting material for class pets. Supply this to elementary schools.
- Grind coffee beans for coffee machine in resource room.
- Make popcorn with a popcorn popper to sell at the canteen.
- Operate electric stapler to help collate materials for other teachers.
- Sharpen pencils for office staff with an electric sharpener.
- Shred paper for staff using switch and control unit and paper shredder.
- Operate electric stapler to help collate materials for other teachers.



This student is using a jellybean switch to run the electric pencil sharpener.

This job can also transfer into an office and day program.

An electric sharpener provides sensory feedback through the noise and vibration.

An electric pencil sharpener can also be run by an AbleNet Powerlink and run by a switch (such as the BIG red switch here in this example). Students can be placed in a position as **helping others** for ...

- the art teacher
- peers
- office staff
- resource room peers



Sewing Class

- Use a switch to operate electric scissors. Scissors could be operated by a peer or assistant to prepare fabric for projects.
- Use the Powerlink to run the sewing machine

Woodworking Class

- Connect a hand-held electric drill to the PowerLink. Use the switch to run the press so classmates work together to make a project.
- Run a palm sander with the Powerlink, which peers can maneuver.
- Run a jig saw plugged into the Powerlink, which peers use while the student runs the tool.

For more video clips of students using switches in functional activities, check out on this website ... <http://www.pisp.ca/video/index.html>

- **Integration - Meeting The Challenge** Video
- **Transition To Adulthood** Video