

Meaningful Use of Switches

1. Why Switch?

Before technology is introduced to the student, it is essential to establish the **reasons** or **purpose** for which the technology is to be used. Consider the following:

- the use of technology should be viewed as a possible means to an end
- the student's goal will not be to learn to use a switch; instead the switch will be used to allow the student to attain an otherwise unachievable educational goal (i.e. Joy uses a switch to turn on the blender to make cookies with her mum)
- the use of technology is only appropriate and beneficial when it enables the student more control or greater participation in an activity, which is educationally valid
- the use of technology should not be considered if the student can perform the activity directly (for example, determine first if the student can learn to access the play and stop buttons on a tape recorder before considering the use of a switch)

2. Getting Started.....

In order to operate a switch successfully, the student will need a **controlled, reliable movement**. To help determine what switch site the student finds the most successful (i.e. possibly through data collection) and to assist in teaching the student to use the switch effectively, the Occupational Therapist, Physiotherapist or Speech and language Pathologist should be consulted.

There are several variables, which will influence the student's ability to learn. Consider the following:

- **Motivation is key to success:** Interactions with peers often enhance motivation and should be encouraged during switch activities. The switch activities should also be incorporated into **real functional routines**, which will provide the student with **enjoyable, motivating and meaningful experiences**.

- **Student Position:** The main goal for positioning is to provide adequate support so that the student can focus on isolated movements (e.g. with hand, head, or other body part for switch activation).

- **Type Of Switch:** Switches can vary in size, shape and sensitivity (i.e. the pressure required to activate the switch), color and method of activation. It is necessary that the switch selected is compatible with the student's motor movement. For example, different switches can be activated by touching or pressing the switch surface, pulling a lever or squeezing a switch.

- **Switch Site:** The site is where the switch will be positioned, to make easy access for the student. A **reliable switch site** will be determined according to the student's position and ability to use selected movement to access the switch. It may take experimentation over time with the switch for an appropriate site to be established. Keep in mind that even the slightest change in the height of a wheelchair tray or the position of the switch may make a great deal of difference to the student's success in learning to use the switch. Once a switch site has been selected, it may be beneficial to take a photo and/or mark the surface (for example, on the desk) for the switch site, to ensure the switch is set-up in the same position consistently. This consistency is 'key' to the student's success with learning.

- **Sensory Feedback (response to 'hitting' the switch):** This refers to the feedback the student receives from hitting the switch (for example, buzzer sounds and game begins; sound of dice rolling and next player takes their turn in board game; music plays). Motivation will be heightened by a combination of auditory, visual and tactile feedback.

- **Time of Day:** In order to optimize the student's success with learning to use a switch, a time during the day should be selected when the student will be the most alert and willing to participate.