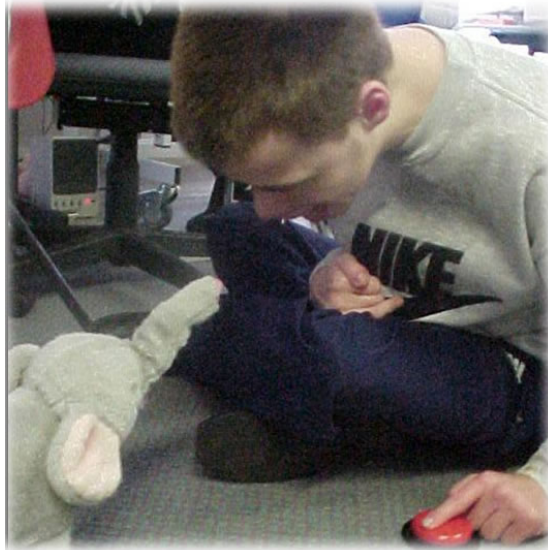


Using Switches Away from the Computer



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Providing a breadth of experience



For some people, a switch will be their only way to interact with the world around them. We must ensure we provide a breadth of experience to help them generalise their switch skills and to build engagement and motivation.



The computer is a very useful tool but there are others we can use. Switches can be used to operate toys, electrical devices, communication devices and used in the multisensory room to provide the breadth of experience our students need.

Using switches with battery operated toys



Toys are a great way to work with switches away from the computer. You can buy 'ready to go' switch adapted toys or adapt your own toys.



Latching and timing control devices add additional functionality to switch toys allowing them to be used at a variety of different stages in progression.



To make a toy switch accessible you will need a switch adapter. These are inexpensive and easy to fit. Don't forget to tie a small knot near the contact. This will help prevent the wire being pulled away from the toy.

Using switches with electrical devices



Some electrical devices can be switch adapted too. To facilitate this we would use a Powerlink Controller.

The Powerlink also provides us with ways to change how the device responds when the switch is pressed. This gives us the flexibility to use switches at a variety of different levels.

Some devices cant be used with the Powerlink. These are devices that might return to 'standby' mode when the power is interrupted for example televisions and CD players.



You can control these types of devices with a switch adapted infra red controller such as the Big Jack.



Using switches with communicators



Communication devices are one of the easiest ways of using switches away from the computer. Quick to setup up, they can help you embed switch use in every aspect of your school day. Communicators can be used at almost every level of switch progression.

We can also connect toys to our communication device to provide additional motivation.

If your student uses a 'bespoke' switch simply plug their switch directly into the communicator.



Using switches in multi-sensory rooms



The multi-sensory room is a great place to work with switches away from the computer.

Students can control a wide range of immersive devices providing visual, auditory and tactile rewards.

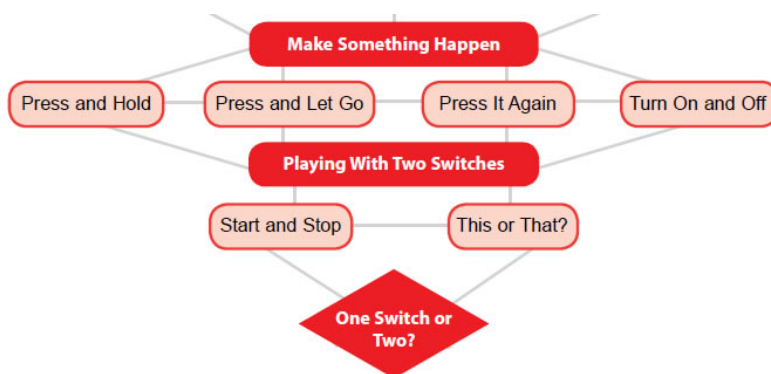
Some multi-sensory rooms use their own switches which are often different from the switches the student uses in the classroom. Use an adapter.

Multi-sensory rooms provide great opportunities yet they are rarely used well in the development of switching skills. Why?

To achieve 'cause and effect', a student has to know that they are making the effect happen with the switch. They can't do that if every light in on in the room!



Stages in switch skills progression



These are the levels in switch progression that are most suited to working away from the computer. You can work away from the computer at every level however you will need to be creative in your approach!

Press and Hold

One of the easiest ways to experience cause and effect. Hold the switch down and the activity will play. Remove your hand and the activity will stop.



Use the Powerlink on 'Direct' setting to operate a fan to reward the student with warm breezes. Attach small pieces of coloured ribbon to 'blow' in the wind for additional visual effect.



This is the default method of operation for most 'walking' toys. Introduce additional excitement in games with walking toys.

Try 'racing' games with two students each controlling a toy, or have the toy knock down stacks of bricks. How about a 'guess who' game?

Some students will find it very difficult to operate a switch in this way. Who are these students?



Press and let go

Often called 'discrete or timed activation. The student presses the switch and the activity will 'play' for a short period before stopping. Press the switch again to repeat the activity.



Some switch adapted toys already work in this way. If your toy doesn't, you can add this feature by using the 'Timed Seconds' mode on a switch latch timer control box. Some Jelly Beamers have them built in!

Electrical devices such as fibre optic curtains can be operated in this way too. Simply connect the device to the Powerlink and use the 'Timed Seconds' setting.



Big Macks are brilliant at this level. Try recording a some of the student's favourite music and having everyone in the class dance when it's playing. Remember that the student may be responding to you dancing and not to the music.

Press it again

At this level the student will be pressing the switch to keep something going, for example playing through a whole song or a series of messages on a communicator.



Use a 'Step by Step' communicator to record a short story that the student can read out to the rest of the class or a series of instructions for someone to follow... "jump... hop ... dance ...

Some communicators have a 'random' feature. They play one of ten random messages when the switch is pressed. These are great tools for playing games like Simon Says...



The key skill here is that the student understands that each press is doing something different. We may have to point this out to the student.

Turn on and off

This is commonly known as 'latching'. Press the switch to turn something on then press the switch again to turn it off. This can be more challenging as the switch now does two things rather than one.



Connect a switch to a music player. Have student turn the music on and off perhaps as part of a game of musical statues.

Much of the equipment in the multi-sensory room works in this way or you can use your Powerlink on the 'Latch' setting.



I always introduce latching with music. Let the student start the music by pressing the switch then tell them it's horrid and you press the switch to turn it off. They'll turn it back on.

Try using music the student doesn't enjoy and have them turn it off.

'Playing' with two switches



If the student is physically able to use two switches, then we can introduce additional breadth giving students the opportunity to express preference and make simple choices.



Both the Powerlink and switch latch timer devices provide the facility to use two switches to control toys and electrical devices.

Communicators too are very useful at this stage. Use an italk2 or two Big Macks, whatever you have in your classroom.

Two Switches Start and Stop

Similar to the latching method but this time using one switch to start an activity and the other to stop the activity.



Use one switch to start music playing, the other to stop it. Be the 'bad cop' and turn off the music and see how quickly your students will turn it back on again.

Use switches to operate lights and other effects ("borrowed" from the multi-sensory room) in your class or school plays and productions.



2 Switches - This or that?

Simple choosing activities with two switches.



Switch latch timing controllers enable us to control two toys or other battery operated devices. Each can be set to respond in specific ways.

The Powerlink works in the same way. Be careful not all controllers have two channels.



Try using an italk2 (or two Big Macks) each with a sound effect that relates to a story you are reading. The student can then press the switch which corresponds to the words in the story. In this example, cheering for the hero and booing the villain.

Be careful about questioning. Give your students time to play with two switches before we start asking them to find specific things...

Useful tips, tapping etc

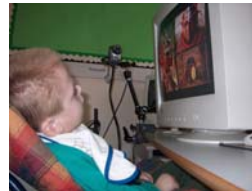


Some learners will repeatedly bang or tap a switch.
There a number of reasons for this.
Does the learners understand what the switch is for?
Are they being stimulated by the tactile nature?
Are they banging the switch to get YOUR attention?

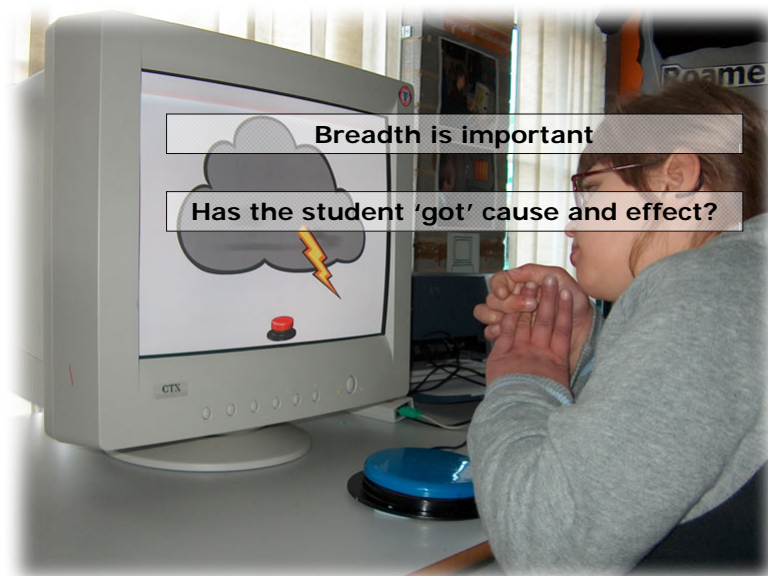
We should be careful with our use of prompting.
Are we focussing the learners attention on the
action of the switch or on the outcome?

The use of switch caps together with an image can
help the student make the link between the
switch and the effect produced

Video clips provide great evidence for a student's
portfolio and enable colleagues to analyse how
the child is interacting with the switch.



Before moving on remember...



And finally

For many of our students using switches will be their only way to interact with the world around them. Their only way to share their ideas, knowledge and opinions with others. Learning to use switches takes time and effort from both the student and the educator or therapist.

It's important that we make time



Useful Websites



Switches, Communication devices and toys.

<http://www.ablenetinc.com>



Switch Progression Road Map

<http://www.ianbean.co.uk/publications.html>



Online switch games and activities.

<http://www.priorywoods.middlesbrough.sch.uk>



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