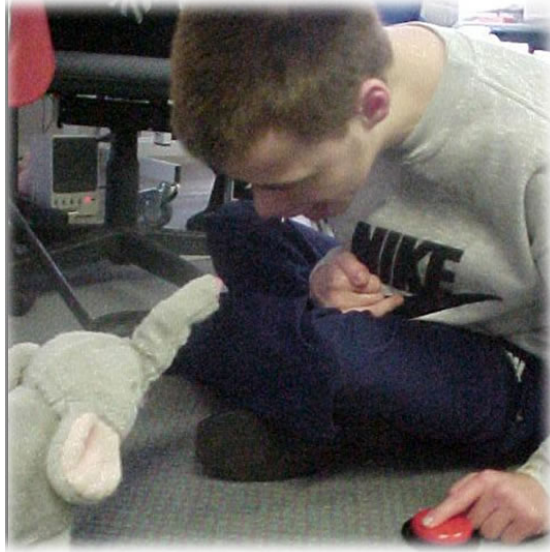


## Making Something Happen



Ian Bean: Special Needs ICT and Assistive Technology Consultant

## Before you start ...



We need to ensure that our students are comfortable and settled. Having equipment placed around you can sometimes be scary.

Tell the student what you are doing to help cue them in to what is going to happen next.

Use wireless switches and IWB to maintain distance and to remove distractions.

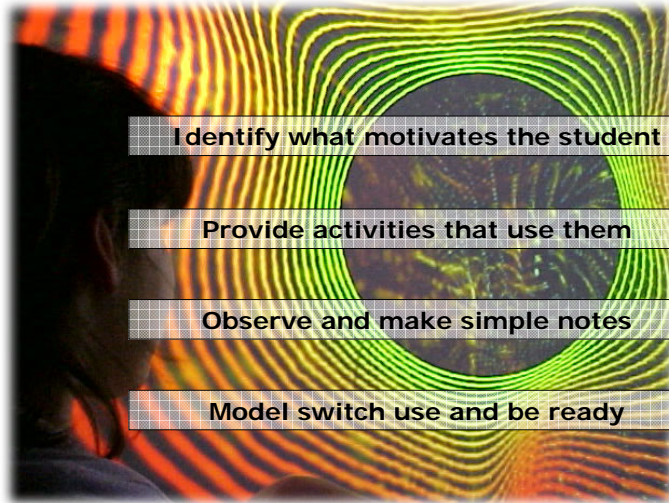
If a student pushes or throws a switch, try holding it and presenting it with an appropriate cue.

Use the floor space if you're using toys that walk or move around.

You may have to persevere and try many different strategies.



# Looking Listening & Responding



Identify what motivates the student

Provide activities that use them

Observe and make simple notes

Model switch use and be ready



## Motivation is the key

# Personalise and observe ...



Research shows students with complex needs are more likely to respond to things that are familiar. If we can identify what motivates our students to look, listen and interact, we can use resources such as open framework software to create them.

Take the time to observe and record how the student responds to the activity. Is a pattern appearing?

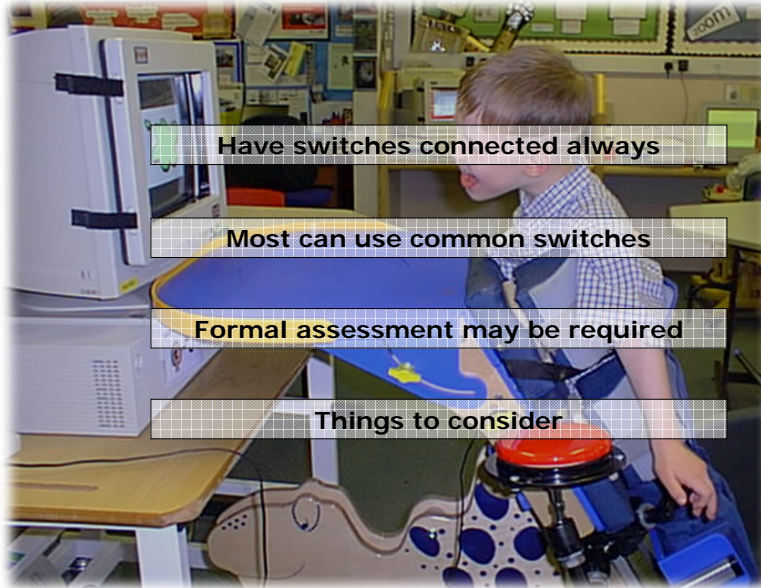
Use your observation notes to choose activities that you know the student will respond to.

Model the use of the switch and verbally cue the student to effect generated. Don't use prompts like 'press the button'

Use Switch Caps to add images to the switch which link it to the effect.



# Introducing Switches?



Have switches connected always

Most can use common switches

Formal assessment may be required

Things to consider

# Which Switch?



Most of the students we work with will be able to use a Big Switch if there are motor problems we may need a formal assessment.

Size and colour is important. Can the student see the switch against the background tray? Is the target area big enough for them to use.

Positioning is important but there is no magic solution. Things change.

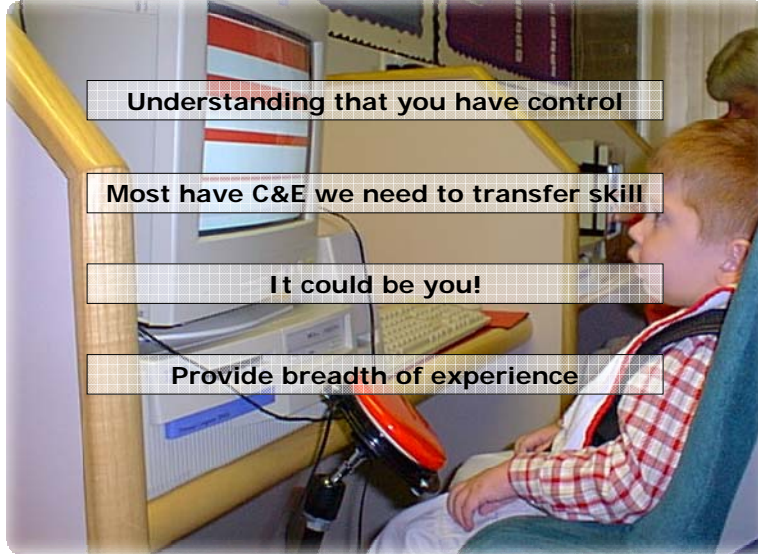
Avoid large movements that could be tiring or hurt the student. Remember that later they will need press the switch many times a day.

If you're not sure, seek advice. A multidisciplinary approach is better.

If you're connecting a switch to computer, you'll need a switch interface.



## Cause and Effect



## Breadth of experience



### Press and hold

This is one of the easiest ways to experience cause and effect with a switch. The effect only happens when the switch is held down. Toys, mains appliances and computer software can be controlled this way.

Will this method work for everyone?

### Press and let go

The most common method of activating a switch. The student presses the switch and the effect will play for example a message on a Big Mack or an animation on the computer. Remember that involuntary movements can activate the switch causing the effect. It's important that the student's use of the switch is intentional.

Big Macks are one of the best ways of using switches at this level in your classroom. The student can use the Big Mack in every part of their day.





## Breadth of experience



### Press it again

This is often called 'switch building'. Its purpose is to help the student understand that they may need to press the switch a number of times to complete a simple sequence. It also models the repeated pressing required for two switch step scanning.

Can you see any instances where this might cause problems?

### Turn on and off

Usually called 'latching', pressing the switch turns something on, pressing it again will turn that something off. Powerlink and Toy Control boxes enable this method to be used with toys and mains appliances.

This can be difficult to understand for some students as the switch now has two functions rather than one.



## 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.



## Assessing progress



We need to be absolutely sure that the child understands cause and effect in the context of switch use before moving them on.

Is it enough to see a student press a switch to make something happen on the computer?

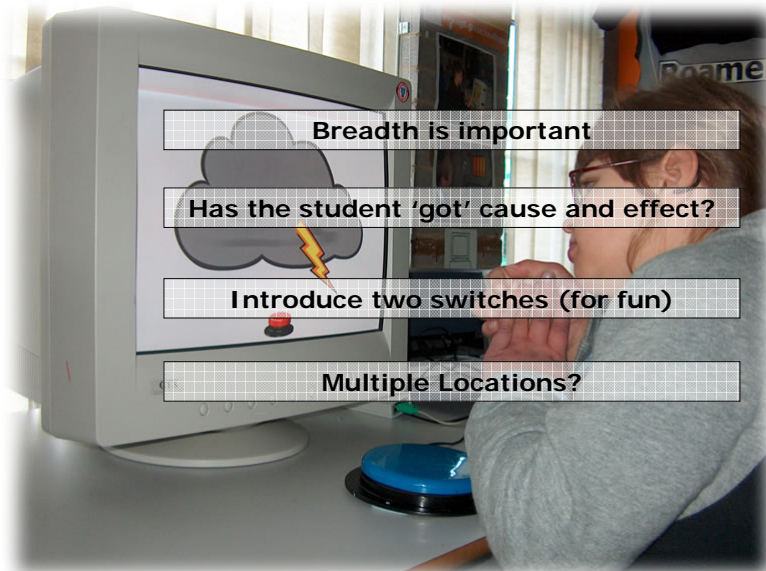
Do we need to see the child use a switch in other situations

Look closely... Is the student pressing the switch to produce the effect or are they exploring the switch because it's on their tray then looking or listening because something (the effect) distracted them.

In every other part of teaching we would look to see skills generalised before moving students on. It's the same with switching skills.



## Moving On ...



## 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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