Using a switch to control battery operated devices

Introduction

The use of a switch with battery operated devices gives individuals with physical disabilities the opportunity to control a variety of devices e.g. toys, tape-recorder. This will encourage the individual to become active rather than passive participants in activities.
Using a switch in this way will encourage the individual to:-

- Understand that their actions can control things i.e. cause and effect
- Interact more with other people
- Make choices
- Develop switching skills, leading to control of more complex devices

Remember – activities need to be motivating!!

What do we need?

Any battery operated device with a single on/off switch can be controlled by a switch by connecting a battery device adaptor.
It is suggested that a battery device adapter is connected to each individual device. The device is then always ready for use and the adaptors last longer.
Battery tips - Although re-chargeable batteries often seem a good idea they tend to lose power over time as they are recharged. Alkaline batteries may be better value over a period of time.

Choosing a device to adapt

- Devices with a simple on/off switch
- If the toy runs on a track the battery compartment and on/off switch must be located on the track rather than on the movable piece
- Bump-and-go toys are useful as they can be contained within a lipped tray and so remain within the individual's field of vision
- Remote control toys with a simple on/off motion are useful as the toy is free of any wires
- Some make-believe toys e.g. food mixer, are battery operated and can be used to perform real functions. e.g. mix pancake mixture
- Any 'real' battery operated devices with an on/off switch can be adapted e.g. tape recorder

If you see a toy you like, buy it right away. It will probably be gone when you return.

Fitting an adaptor to a device

If there is a lid over the battery compartment, use a file to make a groove in the lid to prevent it pinching the wire. Insert the battery device adaptor's copper disc between the battery and one of the battery contacts. Close the lid.

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Use a Switch Latch and Timer Box

Introduce a timing unit in between the switch and the toy. This allows the device to be operated in the following ways:

- Timer mode: the device can be turned on with one switch press and will stay on for a pre-set period of time
- Latched mode: one press of the switch turns the device on, a second press turns the device off

Some latching timer units also have a 'two switch mode'. This allows you to turn the device on with one switch and off with a second switch e.g. a green switch for go, a red switch for stop. Some allow you to control two devices with two different switches. This allows the introduction of a choice making activity. Using a timing device means that progress to using a switch for communication and computer access is easier, as these mainly operate by momentary switch presses.

Sequence of Items

switch timer box jack plug connection toy

Activities

If a battery operated device, such as a toy, is used and the child is only expected to turn it on and watch it, they will soon become bored. It is important to make the device part of a fun activity. For example:

- Moving the car across the table to knock over a tower of blocks
- Operating a tape-recorder for a game of musical statues with their peers
- Operating a tape-recorder to listen to a story
- Controlling the action of a 'Twirl-o-paint' to assist in making decorative cards
- Using a battery powered mixer to make a milk shake

Resource List

Item	Comments	Supplier	Cost
Switch Latch Timer Unit	Connect a switch to a toy via a battery device adapter and get a timed response	Inclusive Technology	from £62
LITTLEMack	Device can act as a timing unit by connecting to a toy via the Toy Appliance jack using the cable supplied. When the switch top is activated the toy will operate for the time it takes for the message to play out	Inclusive Technology	£ 83
BIGMack	Device acts as a timing unit by connecting to a toy via the Toy Appliance jack using the cable supplied. When the switch top is activated the toy will operate for the length of the message	Inclusive Technology	£ 83
Battery Device Adapters	Gadget to connect a battery operated toy / device for switch activation	Inclusive Technology	£ 7

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