

Using ICT to develop cause & effect understanding in learners who have profound and complex disabilities

Learners with profound and complex difficulties may have little or no control over their lives, with activities of daily life either done to them or for them. However, through a structured programme of teaching using physical prompting, learners can develop control over their environment through the use of information communication technology.

Objectives

Individuals can acquire cause and effect understanding by using simple switch devices to activate a software package which produces stimulating images and sounds. In addition, other skills may be acquired, including:

- tolerance of objects and others
- tracking of images
- awareness of change in the environment
- responding to sound and images
- increased use of limbs to activate the switch

Materials and preparation

The teacher will need to experiment with a range of equipment to become proficient in its use and in order to identify the most effective combination of resources to prepare the environment. The range of equipment may include:

- a range of switches including: puff switch, movement activated switch or a direct touch activated switch.
- a computer with single switch access hardware
- a large monitor
- a sound card
- trays or mounted holders
- suitable software

Activities

Initially the teacher will need to physically guide the learner or use hand over hand manipulation. Verbal instructions should be kept to a minimum in order to avoid distraction. As the learner becomes more proficient the cueing can be faded.

Evaluation and assessment

The teacher should look for progress, over a period of time, in a range of criteria including:

- eye contact
- physical attempts to activate the switch
- responses to the sound or screen changes

[Based on the *Enhancing Quality of Life Resource Pack* and the work of Tony Jones.](#)