

EDUCATION

HELP FOR PEOPLE WITH DOWN'S SYNDROME



**DOWN'S
SYNDROME
ASSOCIATION**

A Registered Charity
No. 1061474

Computers as an Aid to Learning – ICT Info Sheet 1

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DSA Education Consortium 2006

- ◆ **Computers can often sustain a child's interest for much longer periods than traditional teaching.**
- ◆ **Computers offer a highly organised environment in which a child is able to learn at their own pace and consolidate their work as often as they like.**
- ◆ **Computers can be adapted to meet the access requirements of children with individual needs.**
- ◆ **Computers also offer the opportunity to enhance the appearance and accuracy of a piece of work that can boost self-confidence and encourage learners to undertake new and different tasks.**
- ◆ **Computers can support access to differentiated work that can be presented flexibly in order to meet individual requirements.**
- ◆ **Teachers, children and parents alike have been rewarded by the way in which children have taken to using the computer and the ease with which they can demonstrate and develop skills.**
- ◆ **Children with Down's syndrome learn best from a combination visual and auditory stimuli rather than from purely auditory instruction.**
- ◆ **When using the computer the information is presented in a multi-sensory manner and presentation can be adapted for individual needs**
- ◆ **Being in control of the computer can be very rewarding for children with Down's syndrome and support the development of independence**
- ◆ **The computer can help to overcome some of the more specific difficulties such as the fine motor control required for handwriting and drawing.**

Computers in school and children with Downs syndrome

IT ESSENTIALS

The importance of using computers is growing for all children. Children with Down's syndrome working in mainstream classrooms or in special provision should have access to tried and tested curriculum software for use in most subject areas.

The 'essential' list gives guidance on the types of software that will be of most value, and should already be available in any well-resourced SEN department. Where they are not available in school they can be accessed through the learning support teams in most areas.

Alongside this a well-resourced SEN department will have access to a scanner and digital camera to personalise work and individualise materials.

When schools are planning and allocating budgets, remember that the software is equally as important as the hardware and include the costs of paper for printing and upgrading software as better versions become available. Try to get to at least one education computer exhibition and use the free demonstration software available from most suppliers in order to evaluate new software as it comes on to the market.

Teachers and LSA's will undoubtedly need to use some of their own time to develop their own IT skills, but this is likely to be a very good investment in their own, as well as their children's future.

Although particular pieces of software will run effectively on old computers, children with Down's syndrome and other learning difficulties arguably benefit more from fast multimedia systems than their more able peers.

Pre-school / early years:

Cognitive software using 'space bar' and 'return' keys
i.e.

'Switch Suite' (Inclusive Technology)
'Blob' (WIDGET)
'Speaking for Myself Plus' (Topologika)
'Jemima' songs and rhymes (Inclusive Technology)

Mouse use /training

i.e.

IT Mouse Skills (inclusive)
Foundation mouse skills (E-Soft)
Living books (Bronderbund)

Primary/ secondary

Talking wordprocessor

i.e.

My first words (RM)
Clicker 5 (Crick)
Talk Write (Resource)
Textease (Softease)
Inclusive writer (Inclusive Technology)

On Screen worksheets

i.e.

Inclusive Writer (Inclusive Technology)
Clicker 5 (Crick)

Reading support

Living books (Bronderbund)
Talking books (Sherston)
Speaking for Myself' (Topologika)
Planet Wobble (Crick)
Wellington Square (SEMERC)
Scally's world (Topologica)

Spelling

Starspell 2000 (Fisher Mariott)
Wordshark (White Space)
Sounds and Rhymes (Xavi.e.r)
Gamz2 (Inclusive Technology)

Memory training

Mastering memory (CALSC)

Numeracy

Numbershark (White Space)
Number tiles (Topologika)

Keyboard Training

2Type (2Simple)
First keys (WIDGET)
Type to learn (TAG)

Using Computers with children.

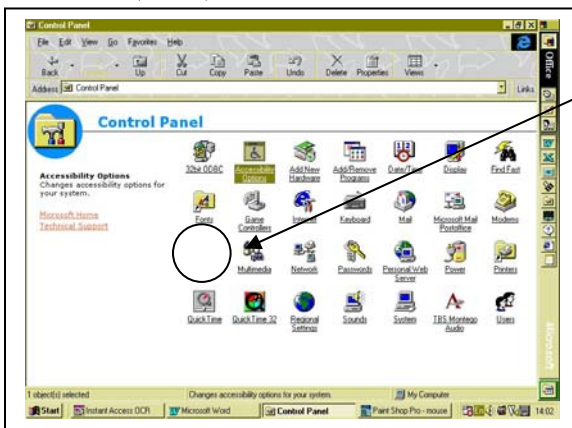
Although using a Easy-Ball or other adaptive device may be useful to act as a means of breaking the task of using the mouse into smaller learning steps, a child will probably need to learn how to use the mouse in order to be able to use the computers in school and the ever increasing number of places that we now find them.

The modern Windows computer has some functions that can greatly assist a child, without the need for separate devices and added expense. Namely it is possible to :

1. Increase the size of the pointer to make it easier to see
2. Slow down the speed at which the pointer moves on or off its target, when the mouse is moved.
3. Change the speed at which the button has to be pressed to achieve the clicking function.

These changes can be made in the following way on all Windows 95/98/2000 home computers.

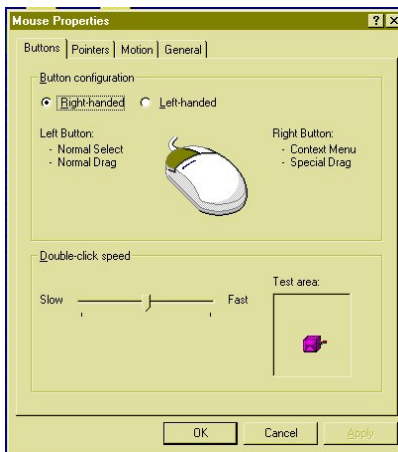
Inside the folder on your screen marked MY COMPUTER is a file called CONTROL PANEL. If you open that file you will see a range of Pictures (Icons) most of which are best left alone unless you are familiar with them.



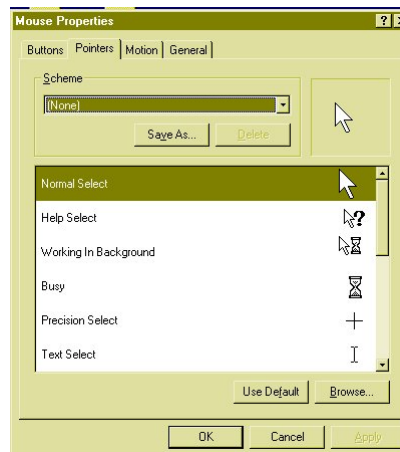
The Icon to explore is called MOUSE.

Double click on "Mouse" in the control Panel.

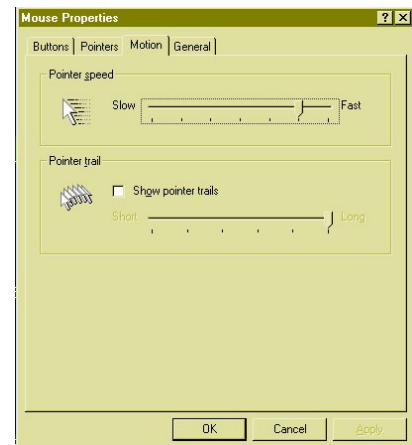
Three panels are available to let you change mouse settings.



Buttons: lets you choose left or right hand operation and click speed.



Pointers: lets you choose a bigger pointer



Motion: lets you slow down the speed of the pointer movement and create a tail to help with visibility.

For windows XP go to Start > Control panel > Classic View > mouse

Useful addresses of software suppliers

Widget Software
26 Queen Street
Cubbington
Leamington Spa
CV32 7NA
Tel: 01926 885303 Fax: 01926 885293
Email: literacy@widgit.com
<http://www.widgit.com>

Semerc
Granada Television
Quay Street
Manchester
M60 9EA
Tel: 0161 827 2927
info@granada-learning.com
<http://www.granada-learning.com/semercindex/>

Resource
51 High St,
Kegworth,
Derby
DE74 2DA
Tel: 01509 672222 Fax: 01509 672267
Email: info@resourcekt.co.uk
<http://www.resourcekt.co.uk/>

Inclusive Technology
Saddleworth Buisness Centre
Delph,
Oldham
OL3 5DF
Tel: 01457 819790 Fax: 01457 819799
Email: inclusive@inclusive.co.uk
www.inclusive.co.uk

Don Johnston
18/19 Clarendon Ct.
Calver Road
Winwick Quay
Warrington
WA2 8QP
01925 256500
info@donjohnston.com
www.donjohnston.com

Topologika software
1 South Harbour Village
Penryn
Cornwall
TR10 8LR
Tel: 01326 377771 Fax: 01326 376755
Email sales@topologika.com
www.topologika.com

Sherston Software
Angel house
Sherston
Malmsebury
Wiltshire
SN16 0LH
Tel: 01666 840433
Email: sales@sherston.co.uk
www.sherston.com

Rickett Educational Media
Great Western House
Langport
Somerset
TA10 9NA
Tel: 01458 254700
info@r-e-m.co.uk
www.r-e-m.co.uk

Down's Syndrome Educational Trust
Sarah Duffen Centre
Belmont Street
Southsea
Hampshire
PO5 1NA
Tel: 023 92 824261
Email: sales@downsnet.org
www.downsnet.org

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35 Charter Gate
Quarry Park Close
Moulton Park
Narthampton
NN3 6QB
01604 67191
info@cricksoft.com
www.cricksoft.com