

SPECIAL NEEDS *I.T.*

June 1993



RM
RESEARCH MACHINES

SEMER**C**

"I'm on target."

I'm taking a Business Administration Course (NVQ2) at a College of F.E.

I'm also getting the vital opportunities I need to develop my independence (as well as my archery!).

That's why I've gone away to College.

The College I chose is the National Star Centre College of Further Education - it's a national college for students who have physical or sensory disabilities.

THE NATIONAL STAR CENTRE
College of Further Education

For further information contact the Vice Principal, National Star Centre College of Further Education, Ullenwood, Cheltenham, Glos. GL53 9QU. Tel: 0242 527631 Fax: 0242 222234



I. T. Service

an Acorn In Education Centre

EarlyBirds

"delightfully easy ... thoroughly recommended"
(Educational Computing & Technology Magazine)

For pre-school, reception, special needs, and visually impaired children, EarlyBird 1 is definitely the easiest Archimedes graphics program - and just £15!

And so much more than just another painting program. With the EarlyBirds series, you can deploy your own pictures in a rich variety of memory, jigsaw and snap exercises for hours of learning activity.



Eautun

For BBC, Master, Archimedes, and Nimbus 186, Eautun is a unique and substantial aid for teaching French in secondary special needs situations.

28 concept keyboard overlays with associated files and extensive backup resources add up to an inexhaustible resource of activities and materials. Too good to miss!

Find us at the Acorn stand at BETT '93 and at the Education Show, or contact us at ITS, Finstall Centre, Stoke Rd, Bromsgrove, Worcs. (0527 570566)



Attention:-

Primary & Secondary Schools
Adult Literacy
ESL
Workplace trainers

From ABC to 123

Reading & Mathematics
learning systems

Developed for special needs

Appeals to all age and skill levels

Assessment, diagnosis & training

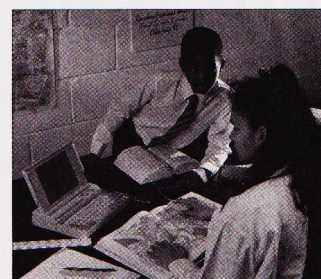
Proven effectiveness, lasting results

More details from:-

The Literacy Development Company Ltd,
8 Thorndales, Brentwood, Essex CM14 5DE
Tel: 0277 229093. Fax: 0277 260243

Contents

Cover Feature



RM Solutions for Special Needs

Research Machines specialises in developing educational computer systems and resources that are easy-to-use and manage. The RM Nimbus range includes desktop and portable computers, which can be easily adapted to allow for alternative input devices and other peripherals.

The award-winning RM Nimbus Window Box is designed to provide a total solution in the classroom, combining an excellent library of software pre-installed on the hard disk, the ability to set up separate user groups and easy-to-use management utilities for the teacher. The Window Box is currently available on the RM NoteBook as part of the DFE portable initiative managed by NCET.

Reader Enquiry No: 1

The Next Issue

If you have any ideas on what you would like to see in the next issue of Special Needs I.T., please ring Richenda Wood, or, Fran Chadwick, at Livewire Public Relations on 081 547 3418

Dear SEMERC letters page	2
Editorial	3
An introduction to CD-ROM	5
Talking books and wild adventures!	9
Topologika's Freddy Teddy series	10
Who needs CD-ROM?	11
Help - I can't draw graphs!	13
Overlay keyboards	14
Adult literacy	16
The SEMERC A4000S	18

The Concise English Dictionary for PC users	20
Communication matters	21
Adjustable height computer workstations	23
Claris Works for reading and writing	24
SEMERC dealers and overseas agents	25
SEMERC LEA centres	26
SEMERC inform information service	27

This complimentary issue of *Special Needs I.T.* has been sent to all primary and special schools as a service from Northwest SEMERC (Oldham). If you would like further copies of *Special Needs I.T.* as part of the **SEMERCinform** service you may be entitled to have them free (see page 26). If not, you can order SEMERC inform direct from SEMERC for £12 (see page 27).

Editor

Richenda Wood

Assistant Editor

Fran Chadwick

Advertising

Robin Williams

Publisher

Martin Littler

Editorial Office:

Special Needs I.T.
13 Uxbridge Road
Kingston upon Thames
Surrey, KT1 2LH
Tel: 081-547 3418
Fax: 081-547 3419

Advertising Office:

Special Needs I.T.
13 The Crescent
New Malden
Surrey, KT3 3LE
Tel/Fax: 081-949 2145

Publishers:

Northwest SEMERC
Fitton Hill CDC
Rosary Road, Oldham
OL8 2QE
Tel: 061-627 4469
Fax: 061-627 2381

The publishers, Northwest SEMERC, cannot accept responsibility for claims or errors in articles, programs, or advertisements.

The opinions expressed are those of the authors and do not necessarily represent the opinions of the magazine's publishers.

Dear SEMERC

We have an A3000 and we want to fit a hard disc drive, but we are confused by all the different types and makes. Please could you give us advice on what to get.

To fit a hard disc you will need both the hard disc drive and an interface. Two types of hard disc are available: IDE and SCSI. The IDE discs are usually cheaper, but SCSI ones are faster and often contain CDFS which allows CD-ROM drives to be connected in the future. Although both work perfectly, we prefer SCSI hard drives due to the fact that you can easily add CD-ROM drives.

If buying a hard drive, buy one with at least 40Mb of storage. If buying a SCSI hard drive system, make sure it also contains CDFS.

Beware of internal hard drives, many use the slot which is already occupied by the user port. If you already have a user port fitted, a good solution is an external hard drive like the Cumana CAA740 podule. This is a fast 40Mb SCSI drive with CDFS which plugs into the grey expansion socket at the back of the A3000 - price £355.00. If you do not have a user

port fitted HCCS Associates can supply a 60Mb internal IDE hard drive with a user port for £269.00.

Another solution worth exploring is the Cumana EMU card or the HCCS Ultimate card. Both come with a user port, fit inside the A3000 and allow either SCSI or IDE hard drives to be connected.

Cumana: 0483 503121
HCCS: 091 487 0760

We use PC's running Windows 3.1. On reading about Windows, I noticed that you can add sound and digitised speech to many programs like Word. On the desktop I have found the sound recorder utility. What else do I need?

Windows and a number of programs do support sound, allowing comments to be attached to text or pictures, but you will need a digitising card to capture sounds.

Sound cards or boards fit inside your computer and allow you to plug in a microphone. When purchasing a sound card make sure it is Sound Blaster compatible. Cards start from £50.00 upwards, depending on quality and facilities, and you need to purchase a separate microphone. When using sound, you may also find you need to use external

speakers. If you want a more portable solution the Logitech Audiomann plugs into your PC printer port and is a combined speaker and microphone at £99.00. It is easy to use and can be moved from computer to computer.

Logitech: 0344 891313

We have recently upgraded our A3000 to RiscOS 3.1. I realise that my original printer drivers need to be replaced by the new !Printers printer driver on the applications disc. However, we normally have a copy of the printer driver on the program disc so we do not have to change discs. When I copied a new driver on to the disk I got a disc full warning.

The !Printers application with RiscOS 3 is rather large at 192K. !PrinterDM took up 120K. You can make it much smaller if you are only using dot matrix printers. To make !Printers smaller, backup your copy of !Printers first and then point at the printers program and double click with the left mouse button whilst holding down SHIFT. !Printers will open and you can delete the lj, ps and PDumpers directories. The !Printers program will now be 54K smaller than the original !PrinterDM.

GLIDE UPSTAIRS ON A STANNAH STAIRLIFT.



Make climbing stairs easy again, with a Stannah Stairlift, in your home.

Full details in this FREE Information Pack.

CALL US
NOW FOR
A COPY!



Phone FREE (0800) 378386
and ask for EXT 812,
or return the coupon below.

For your Colour Information Pack please complete and return to:
Stannah Stairlifts Limited, Dept 6706, FREEPOST, Andover, Hants SP10 3BR.

Are you enquiring for your Household ☐ A relative living elsewhere ☐

Name

Address

Postcode Tel

Stannah Stairlifts Limited is part of the Stannah Lifts Group.

Resource Facilities

are

"Special Needs Specialists"

a SEMERC dealer serving

Yorkshire and Greater Manchester

contact John Smith on
Halifax (0422) 365935

for advice, support, computer systems,
peripherals

special access installations,
software

Olivetti

Acorn

Problems and solutions

*Martin Littler, Director, SEMERC,
peers into the future*

Problems

Is your school delivering the IT capability detailed in the National Curriculum?

Are the computers in your school being used effectively?

These questions will be asked with increasing urgency as the OFSTED inspection teams begin their four year "doomsday" survey of British schools. Few headteachers will wish to learn the answers to these questions from the OFSTED report issued to their governors, parents and competitors (sorry, colleagues) in neighbouring schools.

If this has you reaching for the phone to ring the advisory teacher in your local computer centre, do it quickly. These advisory teachers and the LEA computer centres that they occupy are under threat from the current government bloodlust for LEAs. Despite the fact that the government invented these centres and still pays 60% of the salaries of IT advisory teachers, their days may be numbered.

It has been clear since 1988 that LEA centres would have to bid for the support of schools working under LMS. Many had already drafted business plans to offer a solid range of support to schools who wanted it (and were prepared to pay). What has only become clear recently is that computer centres are to be forced off the level playing field and will not be able to offer services outside their area or to schools which become grant maintained (after a transitional period of 2 years).

If there are less LEA computer centres, several effects will follow. Firstly, your



bulging post bag will grow even larger as computer software publishers lose a hundred large LEA customers and gain 30,000 individual schools with their own budgets. Secondly, the cost of all this direct mailing will be reflected in the cost of the software that you buy, which may rise by about 40%. Thirdly, LEA centres will not be selecting a few dozen good packages from the many thousands available - that job may be passed back to you. And, finally, with the diversity of software and hardware choices made by schools who are deprived of LEA leadership, it will be very difficult to get appropriate training.

Solutions

In October, Northwest SEMERC will be publishing *Delivering I.T. Capability for KS 1, 2 & 3*. This will be available in three editions: Acorn Archimedes, Apple Macintosh and RM Nimbus/PC. If you

buy any other computer you're on your own! If you want to be sure of a copy, see the SEMERC *inform* details on page 27.

Support your local I.T. centre. We are. Thirty two local I.T. centres have become SEMERC centres. They can supply the full range of SEMERC software and hardware, which they receive from us on our most favourable terms. A full list of SEMERC centres can be found on page 26.

Use a computer dealer with a knowledge of education and of special needs. We have selected and trained 21 such dealers. Each has a range of our software and hardware in stock - you can try an ArcTracker, or an Expanded Keyboard at any of the SEMERC dealers listed on page 25.

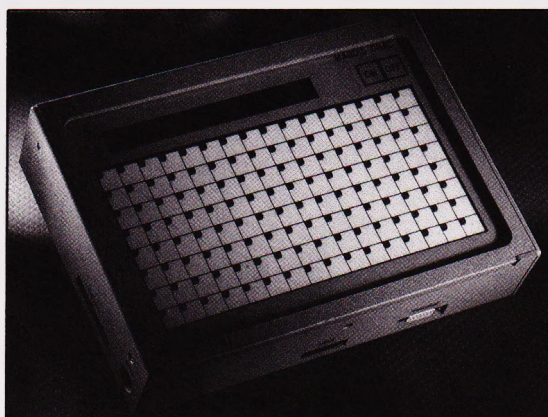
If it becomes difficult to find appropriate computer skills training for your staff, why not provide it yourself? SEMERC will be publishing video training packs showing how to get the most out of popular packages like Phases and My World. The first of these training videos will be available in October. SEMERC *inform* members will be mailed with details of these as soon as they are available.

Finally, our latest Archimedes and BBC catalogues are at the printers. New RM Nimbus/PC and Apple Mac catalogues will be available in the autumn. The idea of these catalogues is to offer you a selection of the best learning material available. You can request any of these catalogues, free, on the reader reply form on page 27.

STOP PRESS ! STOP PRESS ! STOP PRESS ! STOP PRESS ! STOP PRESS ! STOP PRESS ! STOP PRESS

New : ORAC in Plastic Enclosure

STOP PRESS ! STOP PRESS ! STOP PRESS ! STOP PRESS ! STOP PRESS ! STOP PRESS ! STOP PRESS



All ORACs now supplied in a light grey Plastic Enclosure

Significant weight reduction. Now weighs just over 5 lbs

Supplied with matching Light Grey keyboard as standard

Coloured keyboards available. Choose from Red, Green or Blue

Price remains the same. Standard ORAC still only £930.00

Superb equipment

- * Direct keyboard selection.*
- * Light scanning access for Single Switch or Two Switch or Joystick.*
- * Digitised and Synthesised Speech can be freely mixed.*
- * Great flexibility in loading and saving Speech Sets in seconds.*



MARDIS

Business Development Centre
(SECAMS)
Fylde Avenue
Lancaster University LA1 4YR
Tel. (0524) 593692
Fax (0524) 848123

Excellent after sales service

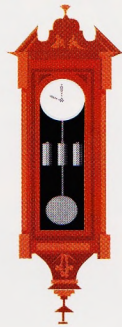
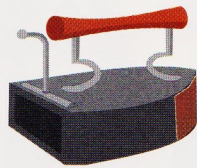
- * 1 year fully comprehensive warranty & options to extend to 3, 5 or 7 years.*
- * Loan machine facilities if you ever have a fault.*
- * Hot Line telephone support from friendly, knowledgeable staff.*
- * Software updates for life.*

JUST PICTURES

Pictures based around curriculum areas
to use in wordprocessors, desktop publishing, framework programs
etc etc.

Price for each pack £ 12 + VAT

NEW PICTURES



Selection of Pictures on
VICTORIANS

Selection of Pictures on
ROMANS



Selection of Pictures on
AZTECS



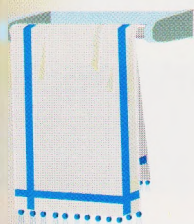
Selection of Pictures on
EGYPTIANS



Archimedes, PC, Apple Macintosh

Price for each pack £ 12 + VAT

OTHER PACKS



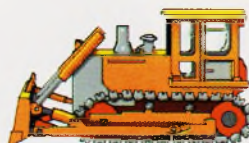
Selection of Pictures on
H O M E

Selection of Pictures on
HOLIDAYS



Selection of Pictures on
FRUIT AND VEG

Selection of Pictures on
VEHICLES



Selection of Pictures on
I C A N

Also available:

FARM - SEASIDE - ONCE UPON A TIME - PICTURES FOR MATHS - PERCUSSION INSTRUMENTS

SEMERC

Northwest SEMERC, Fitton Hill CDC, Rosary Road, Oldham OL8 2QE, 061 627 4469, Fax: 061 627 2381

MY WORLD

2

(£ 30 + VAT)

The enhanced version of Derbyshire's Award winning program MY WORLD.
New features include "snap to grid", pop-up windows, rotation and sizing of images

NEW SUPPORT PACKS

FACE IT

£ 15 + VAT



LETTERS AND NUMBERS

£ 12 + VAT

THE GARDEN

£ 18 + VAT

AWARDS AND REWARDS

£ 15 + VAT

Certificate of Merit
This is to certify that
Chris Smith
achieved
Gold Award
in
Mathematics
Art
Swimming
signed

DINOSAURS

£ 18 + VAT



COPY AND MATCH

£ 12 + VAT

CAD-Computer Aided Design

£ 15 + VAT



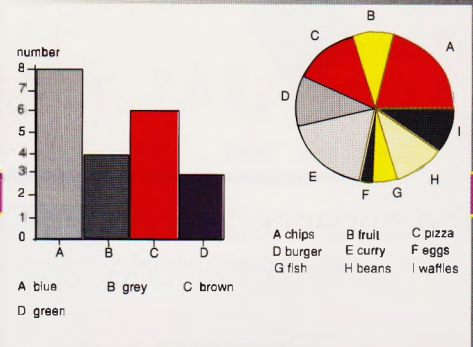
KITCHEN DESIGNER

£ 15 + VAT



GRAPHPLOT £ 18 + VAT

PHASES Support Packs



WELLINGTON SQUARE

£ 15 + VAT

SCATTERCAT £ 18 + VAT

includes the book

OPTIMA Support packs



HAIRY MACLARY

includes the book

£ 18 + VAT

Our World in Space

Astronomy and the Stars

Our Solar System

Man into Space

The Discovery of Space

Quiz time??

WORDS+PICTURES

OUR WORLD IN SPACE £ 15 + VAT

MY WORLD Support packs



EGYPTIANS £ 12 + VAT

TRAINS £ 14 + VAT



mummy
embalmed
preserve
amulets
Priests
coffin
tomb
sarcophagus
burial
chamber
afterlife
sealed
scarab

SEMERC

Northwest SEMERC, Fitton Hill CDC, Rosary Road, Oldham OL8 2QE, 061 627 4469, Fax: 061 627 2381

An introduction to CD-ROM

By Jenny Taylor, CD-ROM Project Manager, Northwest SEMERC

There seems to be a great mystique surrounding CD-ROMs at the moment. As you may know, we at SEMERC are developing a CD-ROM - *The SEMERC Special Resource CD-ROM*. This is one of thirteen CD-ROM projects currently being funded by the Department for Education.

People came to our stand at *Micros for Special Needs* not really knowing what to expect, but with a vague notion of something new and radically different. Many were worried that it was another thing that they were going to have to get to grips with in an ever-changing environment. What I hope to do in this article is to answer a few of the questions that we have recently been asked and to talk a little about a couple of the other on-going projects.

What's a CD-ROM?

A CD-ROM looks just like an ordinary audio CD, and acts like any other computer disc. The new thing about it is that it can hold about 800 times as much as a regular 3.5" floppy, or ten times as much as a reasonably sized hard disc. It can also provide "real" sound from its own audio track just like a Simply Red or Beethoven's 5th CD on the stereo and it can store high quality images.

A CD-ROM needs its own drive, which plugs into the back of your Mac, Archimedes, Nimbus or PC - a bit like the drives that we had on BBCs. Some of the newest models of computer have an integral CD drive as well as a floppy drive.

CDTV from Amiga and CDI from Phillips, are special computers with a CD drive that use your own television as the monitor.

Is it expensive?

CD-ROM drives for the Archimedes cost about £400-£500. However, the price of CD discs vary tremendously at the moment and can cost anywhere between £50 and £2000! You will probably find that discs which are sold into the home market -



talking books and arcade games - are relatively cheap compared to specialised information CDs.

Is it difficult to use?

Using a CD is just like using an ordinary disc, although some need special installation procedures, such as a set-up program installed onto the hard disc. The main problems tend to arise because there is so much more information and it can be difficult to find one's way around. Much of today's CD technology is easy to use and simple to navigate around, but it is still early days and developers are very conscious of finding the best ways of presenting their material.

What's in it for special needs?

Terry Waller from NCET, talking transatlantically, said, "A good CD should give you *additionality*." It should give you what you had before and a bit extra! Maybe that bit extra is the sheer quantity of information and choice, perhaps it is animation or top quality sound. It could be that the designers of the software have used the space to provide the teacher with more options and settings, or to enable the material to be presented at a variety of levels or in different media.

Many of the benefits for learners with special needs are those that we have

already come to expect from computers - motivation, additional sound and graphics. Within the DFE projects, developers have been encouraged to look carefully at access issues for a range of learners.

The Advisory Unit: Computers in Education is building an interactive atlas. This will use Bartholomews' Maps and statistical data from relevant government sources. Users will be able to choose maps, datafiles, scale, display and add their own data from a database or spreadsheet on disc. Teachers can provide a range of differentiated activities and with the addition of well designed overlays, guide learners with special needs through Key Stage 3 Geography activities.

The CD-ROM for Chemistry being developed at Nottingham University will be an interactive encyclopaedia of chemical information. Text can be presented to students at three levels of difficulty. There will be hundreds of short video sequences of experiments, as well as animated molecules, processes and structures. Students can see dangerous or expensive experiments in this way. It will also allow students to review an experiment, which they may have already done, as many times as they want.

The moving visual image will also make it possible to explain complex processes to students with auditory impairments as well as other students who find it easier to take in information visually. The data processing section will allow data to be displayed in a variety of ways - the team, which includes Andy Pearson, the author of *Compose*, is exploring the idea of "audio" graphs, finding sound analogues of a visual display. This is being done with visually impaired users in mind, but will also be a useful mnemonic to all students and provide an extra dimension to students who need additional reinforcement. A good bit of "additionality" there!

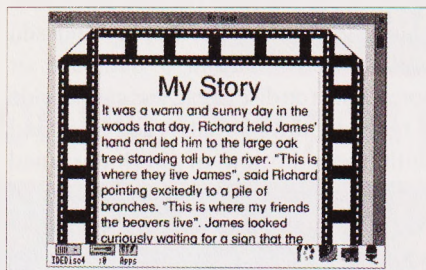
Snitting for beginners

Sue Briggs experiences Special Needs Information Technology (SNIT) at the Hereford Education Centre

It was hot. Real hot. The sun was beating down but the perspiration running down my back was ice cold. What had I let myself in for? I was about to be SNITted!

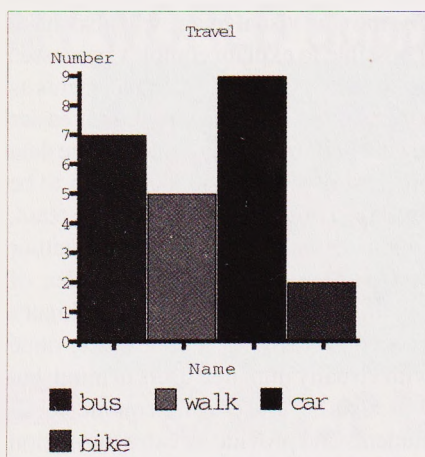
I passed through the corridors of Hereford Education Centre, resisting the temptations of the coffee bar and entered the SNIT chamber.

"Oooh, hello!" said Jayne, "come and have a look at this . . ." and we were off.



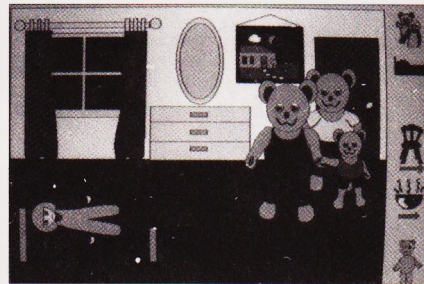
As I had already used Phases, Jayne introduced me to Full Phase. The speech option on this program is especially useful for the children in the Language Unit because they can build up an individual wordbank and then have the computer speak the sentences they write.

Next, we dived into Conform. We explored the program and I used the new Universal Concept Keyboard which is so much lighter than the blue metal ones. Conform makes overlay making with text and pictures wonderfully easy.



On we went into Graphplot, an amazing data handling program for special needs.

We also used one of the sample Graphplot overlays with Full Phase - Jayne says 'always look for more possibilities than those written on the package!'



My World followed, with a range of files already available for subjects across the curriculum. I was especially taken with the 'undressing Teddy' and Jayne said that everyone undresses that poor bear and she thought that we should undress something else. Like a granny. So we did. We took the picture of the old lady from the 'Just Pictures' clipart disc 'Victorians', we took all her clothes off (well down to her bust bodice and pantaloons, anyway) and arranged them around the figure on the My World 'basis' file. We turned the file into a My World screen and then Granny could be dressed and undressed. Unlike the Teddy screen, we left the bin and the word processor in place. I wanted to carry on playing, - er working, on My World, but Jayne had other ideas.

Jayne does give you a short break sometimes but only if you gasp. I had coffee while she showed me some 'treats'. Have you tried 'The Amazing One Bear Band'? Have you seen Brilliant Computing's good ship Titanic?

The adrenalin was flowing by now, so we launched into Optima. We decided to create a Victorian melodrama, in the form of a talking book. The characters were once again taken from the Victorians disc. There was even a railway station as background for some pages. The Oak recorder was used to add the voices with some hilarious results. We even managed to record the telephone ringing - very Victorian. I was thrilled with the results. The possibilities of this software are

almost unlimited. Children could create full colour books with professional looking text using a range of fonts and could add their own voices to the story.

After checking that I hadn't developed a nervous tic (yet), Jayne whisked me off into the realms of CD-ROM. We took a landscape picture from the CD and dropped it into Optima. Next, we added another Victorian figure from the clip art disc (fully clothed this time). A speech bubble and text were included and the text was also recorded using the Oak recorder. Great!

Must have worked hard because then Jayne gave me a real treat. She introduced me to movies and CD-ROM. It would be great to have this technology in the classroom . . . ahhh, perhaps next year. We did have a few problems but by digging through the documentation and some trial-and-error, I came to a much better understanding of the new software and technology than I could have hoped for by working alone. Children can be given a real boost in the classroom with these resources. Their strength lies in their adaptability and the way in which programs and their files can be linked to each other to fit particular requirements.

I had a fantastic 'afternoon and twilight' at SNIT learning about the software. My class will be having hours of fun with it too. They will also learn a lot in the process.

Thanks, Jayne. Now I can proudly boast "I've been SNITted!"

Sue Briggs teaches at the Hampton Dene Language Disorder Unit in Hereford. Jayne Jakeman is Advisory Teacher for Special Needs and IT, usually referred to as the 'SNIT-lady', in Hereford and Worcester LEA.

Eliza Rules OK!

John Smith of Resource Facilities, formerly I.T. Adviser for Calderdale, on training Ministers of Education

Readers may remember a computer program written some years ago called *ELIZA*. It was supposedly the first program to 'fool' people into believing that they were talking to another person, via a telephone terminal, rather than to a computer. Such programs seize on key words in the human entries, using them as the basis for the computer's output. So you frequently get set patterns and bizarre responses, and the bulk of the human input is ignored.

computer: 'Hello. What is your name?'

person: 'John Smith.'

computer: 'Hello John. How are you feeling?'

person: 'Lousy. I mean, the country is going to the dogs, the economy is in a mess and there seems little chance of improvement.'

computer: 'Do you like dogs, John?'

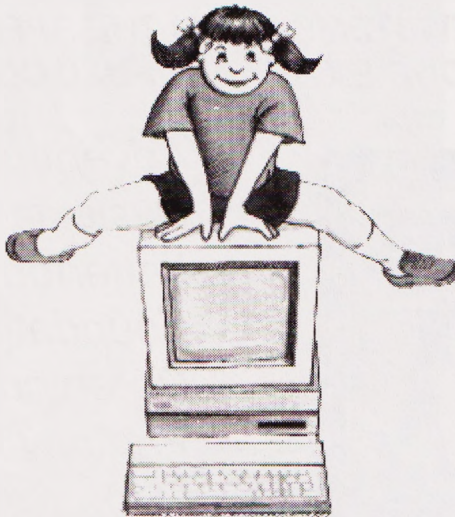
person: '.....'

Tomorrow's World

I recently heard on *Tomorrow's World* that someone is offering a prize for the first such program to fool a jury of eight. Well, the examples I have come across so far would have difficulty fooling a child of eight, let alone eight adults. What the prize giver is looking for is the sort of thing you see on *Red Dwarf* or *Blake's Seven* - something that not only sounds like a real voice, with tone and inflection, but also uses language with subtlety and humour. Such a system, communicating by listening and speaking, as opposed to keyboard and monitor screen, would be a real tool in special needs, but still seems a long way off.

Whitehall Secret

But I can now reveal a previously well kept Whitehall secret. Eliza is alive and kicking and has been for many years. The computer program (admittedly a rather primitive version) has been used as a major part of the training program



administered to new and prospective government Ministers and Spokespersons. The purpose of such training, using *ELIZA*, is to provide politicians with what are, apparently, essential communication tools of a rather specialised kind. I mean, of course, the ability to ignore illogicality in their own arguments, evade probing questions, hide the truth, mask u-turns, present retreat as advance and wrong foot opponents. All perfectly provided by *ELIZA*-speak:

interviewer: 'Minister, how will publication of school league tables help children with special needs?'

Minister: 'Parents need to be able to assess schools via league tables to be able to decide where to send their children.'

interviewer: 'But how can national tests properly reflect the hard work done by children beset by problems?'

Minister: 'Teachers need to assess the children to be able to design appropriate programmes of study.'

interviewer: 'Surely national tests are irrelevant in special needs, where work programmes are individual and monitored almost continuously?'

Minister: 'Parents and sensible teachers overwhelmingly want to be able to assess schools, therefore tests are needed to provide essential league tables.'

Ministers of Education repeatedly complain, not necessarily with supporting evidence, that educational standards are falling. Many groups and institutions are blamed for this. Perhaps the one group Ministers rarely blame - Education Ministers - would provide a better exemplar of what a good education provides, particularly in language and communication skills, were they to attend more carefully to how they communicate themselves, particularly remembering that true communication is a two way process.

Clones

Or perhaps *ELIZA* is not being used to train Minister at all. Perhaps the *Tomorrow's World* scenario is already here, and Ministers are actually clones of a sophisticated *ELIZA* that can walk and talk and pat babies on the head. That would explain the uniformity. It would also explain their expendability. After all, discarding a computer clone is not all that important - you can always make another one - and we do seem to get through rather a lot of them, particularly in education. The trouble is, the program seems to have caught a virus or something. Each new Education Minister Eliza Clone (EMEC) seems to be more illogical, more prone to bizarre responses than it's predecessor.

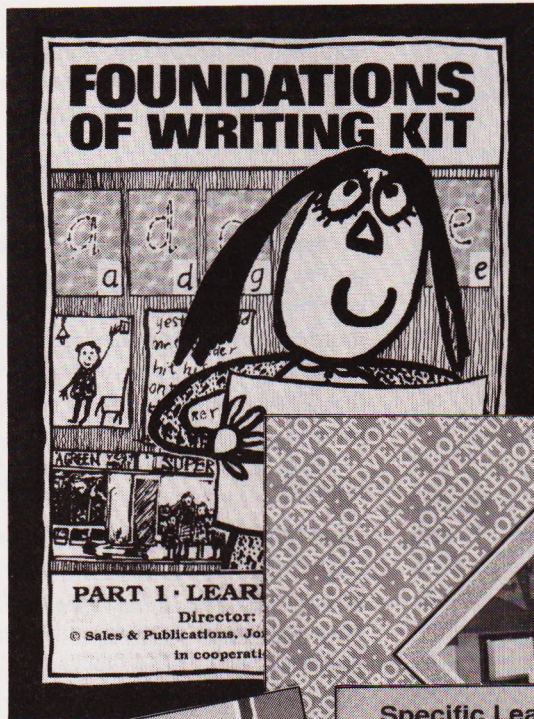
Frantically searching

That must be why someone has announced a competition for a new improved *ELIZA*. Whitehall has at last realised that EMECs are degenerating, and so is frantically searching for a new computer program to replace them. Looking at the quality of the present ones it should not be too difficult. Someone has probably knocked one up already on an old BBC B computer.

Sales and Publications

Jordanhill College of Education

HERE ARE JUST A FEW ITEMS FROM THE SPECIAL EDUCATIONAL NEEDS SECTION OF OUR EXTENSIVE FULL COLOUR CATALOGUE...



- Adventure Board Kit
- Dyslexia
- Letterforms Kit
- Foundations of Writing Kit
- Parentcraft
- Fantasy Islands
- Code Cracker



For further details of these and other publications please contact...

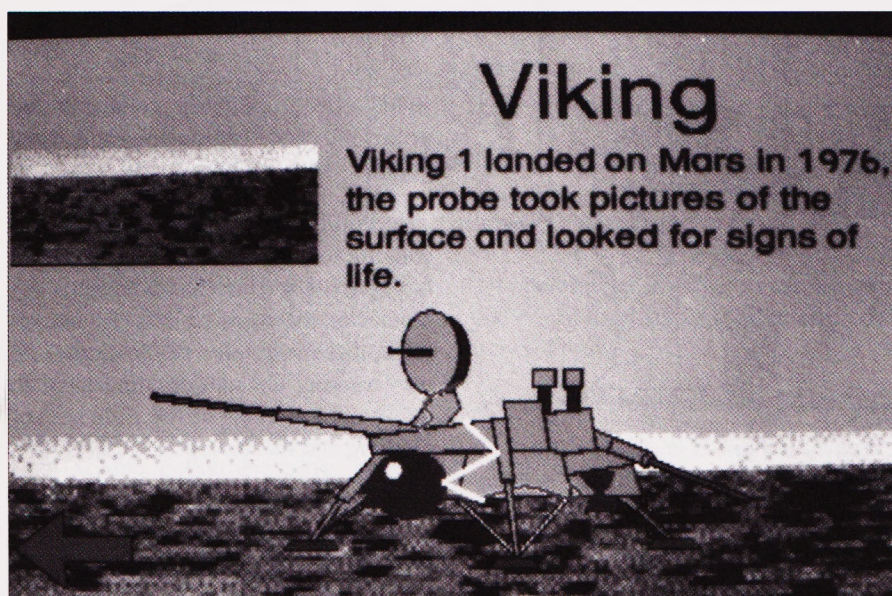
**Sales & Publications,
Jordanhill College of Education,
76 Southbrae Drive,
Glasgow,
G13 1PP**

Telephone:- 041 950 3170/1

FAX:- 041 950 3268

Talking Books and Wild Adventures!

by Paul Nuttall, Deputy Director, Northwest SEMERC



Have you every wanted to create talking books, adventures and branching stories combining text, pictures and speech?

Yes? Then let me introduce you to *Optima*, a versatile new package for the Archimedes and Acorn 'A' Series computers which Simon Hayles, author of *Moving In* in collaboration with SEMERC, developed especially so that you could do that very thing.

Easy-to-use by children and teachers alike, *Optima* consists of several different elements that can be combined to produce exciting and colourful adventures designed for reading or for listening to. The elements are as follows:

Pictures:

Users can build-up a wide variety of scenes using a mouse to drag !Paint or !Draw files straight onto an Optima page. Objects can be readily positioned and sized using simple function key commands such as 'front' or 'back', 'nearer' or 'farther', 'taller', 'bigger', 'wider', etc.. One scene can then be linked to another, like pages in a book, to create a continuous story line.

Pictures can also be dropped directly into Optima's picture bank and taken from there onto a page. Optima compresses all images, so very little

memory is used. As a result, it will work on any Acorn Archimedes and Acorn 'A' computer. Even a basic 1024K computer.

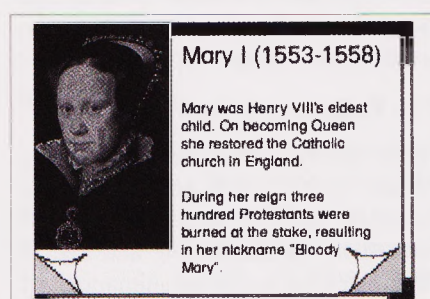
Text:

Text can be produced in a wide variety of fonts and colours and can be positioned anywhere on the screen and sized accordingly. Users who wish to produce cartoon-type stories can use Optima's speech bubble option.

Sound:

Digitised sound can be dragged and dropped onto text and pictures, enabling the user to replay the sound by clicking a mouse on the appropriate object. For example, a cat can be made to 'Meow' and a van can be made to go 'Vroom vroom' and the text can be spoken. New sounds can be created using an *Oak Recorder* or similar device.

Linking pages:

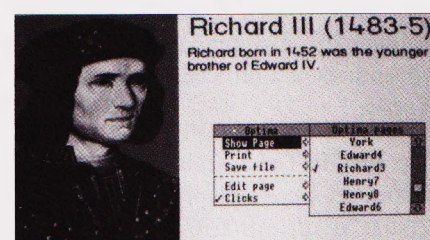


Stories can be quickly built up by copying pages, changing text and moving characters. Optima's blank book template and page turn graphics enable users to create books without worrying about linking pages.

Applications:

Optima can be used for the following activities:

- * To produce simple books, adventures and branching stories.
- * To create talking books, which children can listen to and read on the screen.
- * To build a powerful branching database.
- * To make speaking dictionaries in any language, be it English, French, German, Welsh or Punjabi. By clicking on a picture or text, the user can hear the spoken word.



Every time we show Optima, someone will make a really useful suggestion and a new use for Optima is found.

Where to get it:

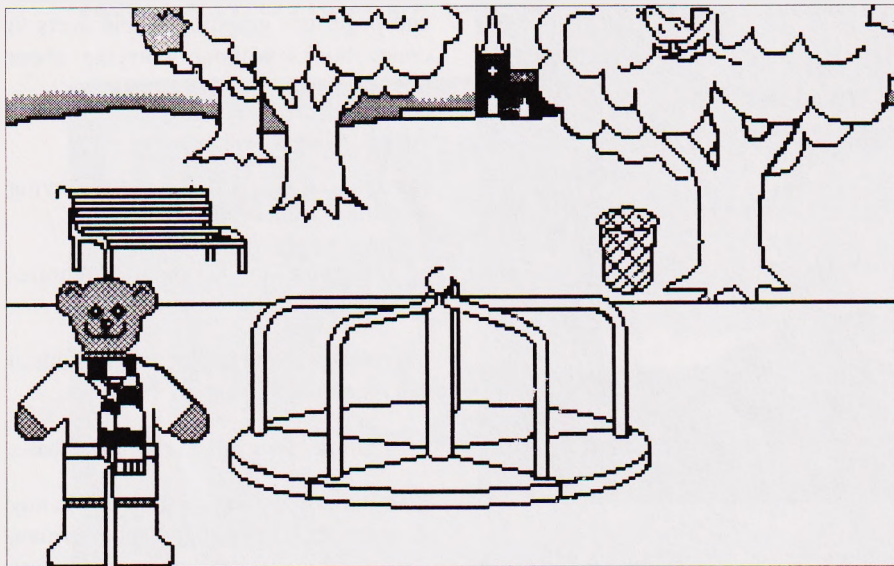
Optima is available from SEMERC at £18.00. This price includes a site licence and a freely copiable run-time version of the program, so that users can distribute their work. Telephone SEMERC on 061 627 4469.

Resources and materials:

If you are developing materials using Optima, SEMERC may be interested in publishing your work for a royalty - you won't get rich, but think of the glory! Send your Optima files to me, Paul Nuttall, at SEMERC, and even if we don't publish your work, we will return your disk with some complimentary resource files.

Topologika's Freddy Teddy Series

*A review by David Haigh, Curriculum Development Teacher
Knottingley High School, West Yorkshire*



Over the last two years Topologika has developed a suite of Archimedes programs written specially for young children, based around the activities and adventures of a little bear called Freddy Teddy.

The Freddy Teddy series is designed to help develop concepts of colour matching, visual discrimination, sequencing, number recognition and counting. It also encourages the development of logical thinking, forward planning, communication skills and memory skills. The children have to help Freddy Teddy solve a wide variety of problems such as icing party cakes, exploring an adventure playground, dressing appropriately, retrieving a lost ball from a tree and hanging out the washing after an accident with a puddle. The children soon identify with Freddy Teddy and enjoy the interactions at the computer and working with the support booklets and pictures that accompany each program.

All the programs may be operated from the mouse, space bar or an overlay keyboard and have a teachers' page for modifying the options. They are particularly suitable for children with learning difficulties.

The Playground

This is my favourite of the series. Children become involved in pre-logo activities which help to develop logical thinking, spatial awareness, sequencing and counting up to 5.

The setting is a playground in the park. There is a climbing frame, swing, slide, roundabout and a see-saw. The children choose the apparatus for Freddy to play on and then, from a set of icons/symbols at the top of the picture, they enter a sequence of instructions to make Teddy perform. If the procedure is correct, the animation begins. Freddy's actions are supported by digitised speech and sound effects, which add to the enjoyment of the program. The thinking skills developed by this program enable the children to transfer their thinking to other simple logo activities such as constructing simple programs to draw shapes and pictures with Topologika's Tiny Logo program, or to control a turtle robot.

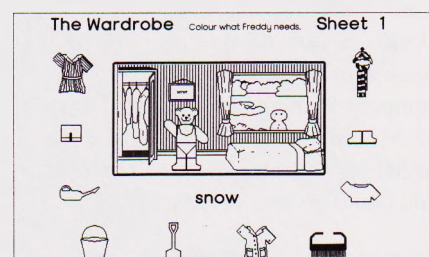
The Puddle and the Wardrobe

These are two new games featuring Freddy Teddy which help to develop memory, colour matching, visual discrimination, sequencing and logical thinking. Once again the animation and

sound effects are very good and the programs are stimulating and very popular.

The Puddle begins with Freddy out walking in the heavy rain. He falls in a large puddle and then has to hang his wet clothes on the washing line. He cannot remember the colours of the clothes he was wearing and the children have to help him by clicking on the right item of clothing and its corresponding colour.

In the wardrobe program the children have to dress Freddy in the correct clothing for a day in the garden, making a snowman, paddling in the pool, or bathing at bedtime. When Freddy is fully dressed he appears in the chosen scene with his friends the ducklings, who swim around chuckling.



Freddy Teddy

The disc contains three programs to develop colour matching, sequencing, comparison and visual discrimination. Freddy Teddy performs on his skateboard then jumps in a hot air balloon, makes cakes in his bakery and works in the control box at his factory. For example, in the bakery the children help Freddy to ice the cake and put a cherry on top. The colour of the icing and cherries have to match the colours of the cakes on the shelf and once this is achieved Freddy eats the cakes. This particular game is very popular. The pack includes story books and worksheets.

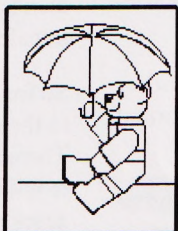
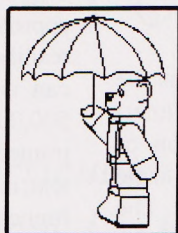
Freddy Teddy's Adventure

This is an adventure game for infants. The children have to find honey, nuts and

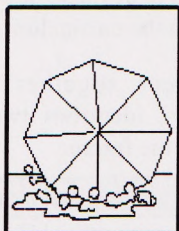
The Puddle



Colour. Cut. Shuffle. Sort.



Sheet 2



the time of the party before they can join the picnic. The game involves decision making, problem solving, counting and memorising numbers.

The children are expected to work in small groups, and as there is a fair amount of reading, it may be worthwhile having

an adult helper in the group at the start. Help is at hand if this is required from a wise old owl.

Freddy Teddy and The Balloons

I have also just seen Balloons, which is a number matching and addition program

featuring Freddy. The animated sequences show Freddy Teddy playing with a ball when suddenly, he kicks it into a tree and it gets caught in the branches. To rescue the ball, the children have either to match the number on the passing balloons with the number on Freddy's sports shirt, or have to collect balloons whose number values add up to the number on Freddy's shirt. This program is very popular in the classroom.

Summary

The Freddy Teddy programs are great fun, easy to use and have excellent animation and sound effects. They engage young children in pre-reading activities, decision making, problem solving, number activities and are a good introduction to the concepts of control. Each program incorporates a teacher's page which enables continuity and progression to be addressed and also allows the less able child to benefit from encounters with Freddy Teddy.



New information technologies have made a significant contribution to meeting the social, educational and working needs of disabled people. This article is based on two projects that have sought to exploit compact disc technology (in particular CD-ROM) for blind and partially sighted learners. It is clear from the findings that access to books in an electronic form opens up new curriculum opportunities, and gives learners increased independence.

With the development of any new information technology device or delivery medium, the question usually arises as to how it might be used in an educational context. The answer is not

Who needs CD-ROM?

Dr. Tom Vincent, Head of Information Technology in Education, Open University, explores CD-ROM for the blind and partially sighted

always obvious. In the case of the CD-ROM (Compact Disc Read Only Memory), the emergence of this technology as a delivery medium has coincided with parallel developments in multimedia which provide new opportunities to bring together text, images and sound. For example, publishers are producing computer-based encyclopaedias that use pictures, animations, sound and movies for illustrations that both extend the information content in books and, by using software facilities such as searching and copying, provide resources with significant potential for learning. The potential for some learners is extremely high, particularly those with visual impairments.

Consider Dean, who was a student at the Open University from 1982 until 1990. Dean is blind. As a student he uses a computer extensively for communication with sighted people, such as tutors,

although braille is his working medium. This was very effective but the one resource to which he did not have independent access until near the end of his studies, was a full version of a dictionary - something most learners would take for granted. In 1989, this need was met by adding a speech interface to a commercially available dictionary on CD-ROM. This adaptation was readily achieved and in this case, without any modification to the CD-ROM. It had a major impact on Dean's learning resources.

Jane is partially sighted. Although she can use various devices to help with reading text, either on paper or on a computer screen, she has had a major problem through school and further education college when it comes to finding information in publications. She cannot independently visit the library to read a section of a Shakespeare play and must use a pre-prepared extract from the

teacher. Having all of Shakespeare's plays on one CD-ROM with search facilities that can provide almost instant, independent access, provides a new and enhanced way of learning.

Clearly, the use of CD-ROM as a means of gaining access to the wide range of books and reference works essential to the curriculum, offers considerable potential for learners with a visual impairment. This can be achieved independently in many cases. However, this access does depend on matching enabling technology (such as speech output, large character display, alternative keyboards, switch input) to the interface that is provided for any CD-ROM application. With existing CD-ROM applications, this matching can range from trivial to impossible.

It is extremely important to know where access is possible and to provide guidelines as to how it can be achieved. In some cases, specific adaptations for the enabling technology are achieved through software changes. This approach is being taken in a project funded by the Department for Education, managed by the National Council for Educational

Technology, and undertaken by the Open University in collaboration with the RNIB National Education Centre.

A selection of CD-ROMs, such as the Grolier Encyclopaedia and the Times/Sunday Times annual collection of articles, are being made accessible to the blind and partially sighted learners. The objective is to evaluate how they can be used within the curriculum.

This project, together with other experiences, identifies two important actions for the future:

Every published CD-ROM that could be used in education, should be evaluated in terms of accessibility by learners with a visual impairment, and supplementary guidelines should be produced for those discs that could be made accessible.

All publishers using CD-ROM should be aware of the key features of application interfaces that make them accessible, and of alternative options for including data on discs that could provide more direct access.

If these objectives could be achieved, there is no doubt that many learners with

a visual impairment would greatly benefit. The key advantage of the CD-ROM approach is that information can be so readily and quickly found. A single disc can contain the equivalent of about 500,000 pages of braille, or about 1,000 printed books. Despite this amount of text, individual words and phrases can be found in seconds, and associated text can then be read, printed (print or braille), or transferred to a word processor.

So for Dean and Jane, one of the barriers to their learning is potentially removed. There is still some way to go before there is wide spread use of this technique for accessing books. The prospects are very good for providing further independence for learners. This is yet another example of exploiting technology (CD-ROM) which was not originally developed with this application in mind.

Tom Vincent is Head of The Centre for Information Technology in Education. His last book, 'Learning Difficulties and Computers: Accessing the Curriculum' (Jessica Kingsley (1992), £9.95.), includes information on CD-ROMs.

On 1st January 1993 The Northern ACE Centre and the North West Regional ACCESS Centre merged to form The ACE/ACCESS Centre



Assessment

Training

Advice & Information

Professional Development

Consultancy

Loan Scheme

The Centre offers a range of services for learners with sensory, physical and communication disabilities who would benefit from the use of technology.

For further details contact:

Steven Broadbent on 061 624 5214 Ext 1814

or Roger Bates on 061 627 1358.

ACE/ACCESS Centre, Park Dean School, St Martin's Road, Fitton Hill, Oldham OL8 2PY

Newton & Brewer Technology Services

Education

Special Needs

Universal Networking

Authorised Service Centre

Unit 16 Sedgeway Business Park,
Witchford, Ely, Cambs CB6 2HY

Tel: (0353) 666011

Cambridgeshire's Acorn Specialists

"Help - I can't draw graphs!"

Trish Hornsey, Curriculum Officer at SEMERC reviews Graphplot, a new package designed to help with the mechanics of graph drawing

Graphplot from Northwest SEMERC is a simple new graph generating package for Archimedes computers. It loads into two windows on the screen - one for entering data and one where the computer builds up the graph for you.

Surveys

Suppose the class has been doing a survey on travel to school. The totals can be entered into the data window and the graph builds up as more data is added. Totals can be edited and the graph changes in response. It will re-scale automatically and will handle negative numbers as well.

Through the menu, you can select to show the graph as a bar chart, pie chart, line graph or line bar graph. Whichever you select, the graph keeps building as you enter more data.

Up to 15 headings can be used, so it will cover months of the year, etc.. The graph has labels and a key (letters or colours) can be switched on or off.

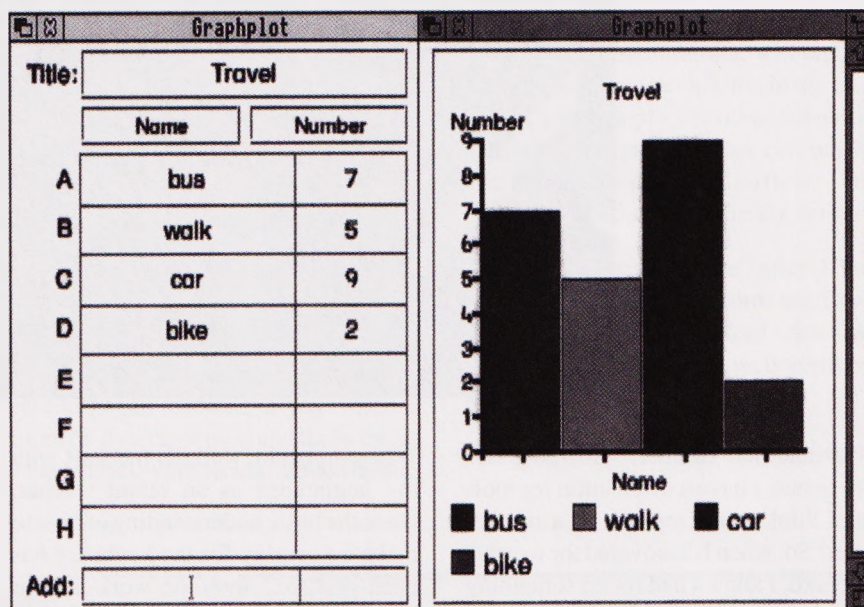
The whole file can be saved or the graph can be saved as a sprite and then dropped into a package such as *Phases* and text can be added.

The print options allow the graph and/or the list to be printed. You can also decide whether you want a full colour printout or an outline which can be coloured in later (very useful if you only have a black and white printer).

Travel survey

An interesting feature of *Graphplot* is the add box at the bottom of the data window. This allows straightforward data collection.

In our example of a survey of travel to school, each pupil could enter their mode of travel in this box and just press Return. Each time a pupil types 'bus', for example, the total in the 'bus' box would increase



by one and the graph would adjust accordingly.

This can be very effectively linked to an overlay keyboard for easy data collection. Just press on the overlay to add an item. Four overlays are included in the pack to get you started, but you can easily make your own using an overlay designer such as *Conform* (Northwest SEMERC) or *Concept Designer* (Longman Logotron). The sample overlays are Birds (a survey of birds in their playground, perhaps), Numbers (what is your height, weight, handspan, etc.), Vehicles (traffic survey) and Months (when is your birthday?).

Bird survey

Imagine the pupils watching a bird table outside the classroom window. *Graphplot* is loaded and the overlay Birds is in use. Every time they see a sparrow, they just press on the overlay. There goes a blue tit and a starling! The pupils press on the overlay for each bird; the computer keeps a tally for them and builds up a graph at the same time.

This is surely what computers in the classroom are for - to do a job for you and

to free the pupils to think about the task and make inferences from the results. Which is the most common bird visiting our bird table? If we did this again in six months time, would the results be the same? Which is the most appropriate way of displaying this information? I would also suggest that the pupils would learn a lot more about what graphs tell us from examining one produced in this way, than from struggling to draw a bar chart and/or pie chart for themselves.

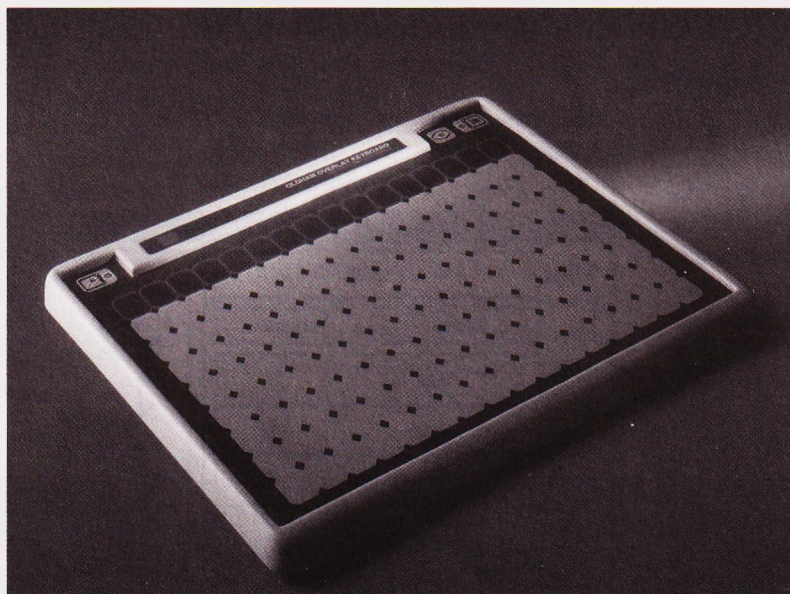
Simplicity

Graphplot is a very simple way of collecting information and building graphs. Why should pupils struggle with an unnecessary chore? I don't struggle to cut my lawn with a scythe, I use the available technology to make it easier for me - I use a lawn mower. I don't use a dolly tub for my washing, I use the available technology and have a washing machine.

Graphplot costs £15 (ex VAT) from Northwest SEMERC, Fitton Hill CDC, Rosary Road, Oldham, OL8 2QE. Tel: 061 627 4469 Fax: 061 627 2381.

Overlay Keyboards

Vicki Mellor, Headteacher at Castlefields Infants School, describes her passionate affair with an overlay keyboard



As a qualified teacher, with 20 years experience, I have a fascination for tools that I think make my life as a teacher easier. So, when I discovered the overlay keyboard, I knew I had found something special. I have to say that there are two things that I feel that I could not do without in the classroom, one is a pencil and the other is my A3 overlay keyboard.

The discovery

I discovered the overlay keyboard some years ago when I was teaching a class that had in it a child with severe learning difficulties. What a tool! I began an affair that has lasted with unbridled passion and it's still going strong. For this piece of hardware can almost instantaneously enhance the learning opportunities for children; and don't think that because I met this keyboard when I was working with children who had learning difficulties, that it can't be used for all children. It can, and may I say with quite spectacular results. This amazing computer peripheral, with its touch sensitive board, can give children the freedom of mind to express themselves in language, without having the constraint of having to write manually. (This is of course dependent on the quality of the overlay that has been chosen, or has been made. The teacher still has to do some work!).

Where to begin, well, let me start with my beginnings as an infant teacher. Once the basic understanding of how to make an overlay for the keyboard has been grasped, then the work is your oyster, so to speak. At first, I learnt how to make a regular overlay for a Master 128 computer and started to develop writing with the class. I look back with laughter at these early days - they were all word overlays and were really quite boring, 8, 16, 32, etc. They were essentially words on a regular overlay for children to press and put into sentences. Although, I did begin to realise that children who were having fine motor skill problems could begin to use the overlay and the computer to do their writing. What a joy to see a child proud of a piece of work which they had produced.

Our school highlight, I remember, occurred when having moved on from mere words to story sentences on the overlay, a child with severe fine motor skills whose hands shook constantly and hampered his written work, came to me and said he wanted to write a story about a gorilla. We sat down together and using a black overlay, we discussed the words he would need, together with little cartoons to help him with some of the more difficult ones. That day, we made the first of many personalised

overlays for him and this 6 year old boy produced a really fine piece of writing of about 100 words long. He was reading his first story, re-drafting it where necessary, and most importantly, being proud of his achievements. The keyboard had unlocked his mind and he was no longer frustrated by his physical difficulties.

Progress

That was in the early days. We have moved on a long way since then. We have even updated our computer from the Master 128 to the A3000, but the overlay keyboard is still with us. Things have moved on in terms of what is on the overlay. Nowadays, we have pictures and phrases, words and symbols, cartoons and colour. The overlays are interesting, stimulating, vibrant and colourful and make you want to use them. No problem in motivating the children to work these days.

Home-made overlays

Although there is a tremendous variety of excellent commercially made programs with ready made overlays, we still find that our home-made ones are useful to adapt to the needs of the school or the individual child. Once you know how to do it using a specific program, it really is easy. In our school, we use *Conform* on the A3000 and *Prompt Writer* on the Master 128. These two commercially designed

programs provide us with our needs in our infant school, and using them we have been able to design overlays that fit into the teaching requirements of the National Curriculum. For example, early listening skills can be developed by using a tape matched with pictures on an overlay. The child listens to the instruction on the tape and presses the right picture. A simple way to tackle English, AT 1.

Story writing skills

Story writing skills can be developed by the use of an overlay. Pictures of scenes can be drawn or stuck on the overlay for the children to sequentially press to re-tell a story. The story line then comes up on the screen for the children to read back to the teacher - the beginnings of the requirements for English, AT 2.

In our school, we use overlays for getting the children involved in collaborative writing. A group of children decide the central characters and situations in their story which they put onto an overlay. Then over a period of time, they write their part of the story. At the end, you have a group story which is often multi-

faceted and more complex than a single persons story. The story can be refined, re-drafted and then printed and made into a book which becomes part of the class library. A real reason for writing and another way of developing the requirements of English, AT 3.

You can devise overlays for lots of different teaching points. At the moment in our school, we are working on an irregular overlay that joins together phonic blends, with endings to make words. Old fashioned phonics are thus given a new and more exciting lease of life.

Not just for teaching English

However, please don't think that the overlay keyboard is just for the teaching of English. Overlays can aid the teaching of all areas of the curriculum.

Topic work takes on a new meaning when the overlay shows pictures of a chrysalis and a pupa to reinforce the written word - Science, AT 2. Weather recording can become a joy when a colourful overlay is used and the learning of the correct symbols is an added bonus.

Commercial materials

There is an absolutely super range of commercially made materials, too numerous to mention individually by name. Each adds to the wealth of a child's education, some by working on the development of specific teaching points and others on the more general. And, dare I whisper, some even help with drill and practice (wouldn't someone be pleased to know that!).

Freedom

For me, however, the freedom of being able to customise an overlay for myself, to produce something that will enhance the education of the children in my class, to take away the physical chore of writing something so that children can unleash their creative imaginations into words...well, that's the climax for me.

When, in years to come, after I have made my selection of records on 'Desert Island Discs' and I'm asked what I will take for my one luxury - well you know what I will say:

"It's got to be.....my overlay keyboard."

the assessment, disability, & technology handbook

a step-by-step guide

written by

Steven Broadbent, Dip.Sp.Ed. (V.H.)
Manager, North West Regional ACCESS Centre
Oldham College

and

Sandra Curran, B.Sc. M.Ed.

What does the Handbook do ?

It offers guidelines on how to assess learners with disabilities so they may effectively use the new technologies now available.

- ★ it discusses some of the relevant issues involved
- ★ it says who should undertake the role of the assessor
- ★ it tells the assessors what they should do and where they can get help
- ★ it sets out pro-formas to be copied or adapted
- ★ it is a practical guide written from tutors' and learners' experiences
- ★ it is a useful source of advice and information for anyone involved with learners with disabilities and who feel that technology can create opportunities for the future

Copies £6.00 each from Mrs G Barry, Continuing Education Department, Oldham Education Authority, Old Town Hall, Middleton Road, Chadderton, Oldham, OL9 6 PP (061 678 4237)

Special Software for Special Needs

ClickSound £12.00 AcornRiscOS

A talking on-screen wordbank to use with any wordprocessor, database or spreadsheet.

Easy to make your own files.

new!!

Clickword £8.00 AcornRiscOS

The original non-speaking version.

Pictogram £18.50 AcornRiscOS

A first database to teach the concepts of datahandling to Early Years and SEN pupils.

Panache £12.50 AcornRiscOS

A sentence generating program for Modern Languages and for SEN in all curriculum areas.

For details of these and other resources, please contact :
Cleveland Educational Computing Centre,
Prissick Base, Marton Road, Middlesbrough,
Cleveland, TS4 3RZ

CECC
CLEVELAND EDUCATIONAL COMPUTING CENTRE

Tel: 0642 325417
Fax: 0642 310078



Adult Literacy

Sally McKeown, Post-16 Special Needs, National Council for Educational Technology, looks closely at the software available for adult learners

In the last edition of *Special Needs I.T.*, I wrote about the problems facing tutors who work with adults and the bulk of software currently available, with its inappropriate vocabulary and "kiddy graphics". In this article, I want to focus on some of the software which can be used with adult learners.

Students with some ability


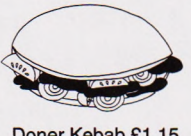




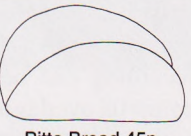







Let's start with students who have some reading ability, but who may be in an adult literacy class or be receiving help from a learning support service. There is now quite a range of software which they can use. One of the most useful organisations is the FE/IT Unit, (Alderson House, Inglemire Avenue, Hull, Tel: 0482 494200), who have produced an extensive range of overlay keyboard software. Files include: *Healthy Eating*, *Basic Catering*, *Safety in the Home* and *The Post Office*. The Unit is working with the County's Careers Service to produce overlay keyboard-based learning materials to support adults and young people who have learning difficulties. This has resulted in the *Careers Guidance Pack* which costs £15.00. All these packs are available in BBC or Nimbus versions with A3 or A4 overlays.

Materials are also available from NCET, (Sir William Lyons Road, Coventry, CV4 7EZ, Tel: 0203 416994). *In the Garden* contains 11 overlays based on the theme of gardening and a booklet showing how the materials can be used as part of a wider learning process. Topics covered

Windows Concept

The Advisory Unit
Computers in Education

Filename: Kebab

 Chips 49p	 Doner Kebab £1.15	 Chicken Tikka £1.50	 Coca Cola 35p							
 Hamburger £1.20	 Shish Kebab £1.25	 Pitta Bread 45p	 7 Up 35p							
0	1	2	3	4	5	6	7	8	9	
£	p	.	and	cost						
										  
										  

include health and safety, the seasons, keeping a log book, descriptive writing and alphabetical order.

Starting Out covers three topics: *Supermarket*, which includes two overlays, one for beginner readers and one for improvers; *Maps*, which can be used as a starting point for work about routes to places of interest in the students' locality and *Pop Quiz*, which uses a database as well as an overlay. The pack is designed to help students who are working towards the Wordpower certificate. Both packs are currently available for BBC and Nimbus but PC and Arc versions will soon be ready.

Windows Concept from AU Enterprises Limited, (126 Great North Road, Hatfield, Hertfordshire, AL9 5JZ), is a utility which enables the overlay keyboard to be used with any Microsoft Windows application (version 3 or later). The materials which are provided cover adult themes such as choosing items from a kebab shop and video library, writing letters and what to buy for cleaning the home. There are also clear instructions for tutors to start making their own resources.

































An invaluable resource is *Newtown* (ALBSU) which is available from ILECC, (John Ruskin Street, London, SE5 0PQ), price £15. It is a problem-solving activity for adults which contains four stories: in the first, the user arrives at a new town and has to solve the practical problems of finding a temporary job and a place to live. The

second story allows the newcomer to make friends and travel around the town. The last two parts involve looking for a job and getting a flat.

Solutions to the problems posed by the computer are contained in a range of support materials which include a newspaper, a street guide to the town, full colour maps, bus and train timetables, a cafe menu, and an inventory of furniture for the new flat, etc.. Although it can be played solo, *Newtown* is an ideal group activity which will stimulate discussion and encourage the use of literacy, numeracy and communication skills.

Learners with more serious problems

But what about learners who have more serious difficulties? What is available for them? You might like to consider software which generates symbols as a way of supporting early literacy. While many of the existing packages focus on children's words, *From Pictures to Words* contains some libraries specifically designed with the older age range student in mind, covering areas such as personal

 rocket	 planet	 cloud	 in	 astronaut	 fire	 computer	 big
 aeroplane	 sky	 sun	 over	 man	 first	 television	 little
 helicopter	 star	 moon	 outside	 woman	 find	 hot	 up
 car	 space	 climb	 clothes	 boots	 fast	 cold	 down

for employment. The authors have made clear distinctions between content-free software (word processors, databases, etc.), drill and practice software to practice specific skills such as spelling patterns and computer-based training programs which provide instruction and assessment, usually for a particular vocational area.

Although the range of software for adults is still limited, developers are becoming aware of adults' needs and there is an increasing range of utilities to enable tutors to make materials tailored to the abilities and interests of individuals.

Free Information

A free information sheet on software for adults with learning difficulties is available from Louise Biddle, NCET, Sir William Lyons Road, Coventry CV4 7EZ, on receipt of a stamped self-addressed A4 envelope.

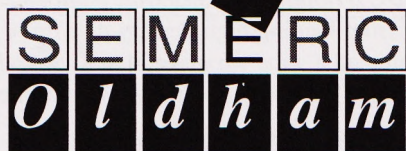
care - health and hygiene, cooking and shopping and pastimes such as snooker, darts and going to the pub. It runs on the BBC, Arc, PC and Nimbus and is available from Widgit, (102 Radford Road, Leamington Spa, CV31 1LF).

This is just a small selection of the software. You will also need to have a

look at the Basic Skills Software Guide from ALBSU. This 80 page spiral bound booklet contains details of over 150 programs for Apple Macintosh, Acorn Archimedes, RMNimbus, IBMPCs and compatibles.

The guide covers software for adult literacy, numeracy, ESOL and training

Northwest



Mid Term Seminars

Multimedia and Special Needs

Wednesday 27 October 1993

Multimedia combines text, sound, still and/or moving images on a computer screen. Software, whether on standard computer discs, CD-ROM, laser disc, etc., can provide a multi-sensory approach to learning with instant and appropriate feedback. Recent technological developments and government initiatives are promoting the use of multimedia in schools and colleges. What are the implications of this for learners with special needs? How might multimedia be used to enhance learning, promote independence and motivate learners?

The day will provide a mix of practitioners beginning to use multimedia with such learners and those who are involved in the development and exploration of the value of multimedia.

For more details, please contact:

Shelley Evans, Northwest SEMERC, Fitton Hill CDC, Rosary Road, Oldham, OL8 2QE Tel: 061 627 4469

The SEMERC A4000S

- a very special system

Paul Nuttall, Deputy Director, Northwest SEMERC, introduces the very latest plug-in-and-go system



If you remember the early eighties you may recall an advertising campaign designed to promote a Sony spaghetti-less hi-fi system, which featured John Clees. The message being that you could buy a music system, take it out of the box, plug it in and listen to the music, rather than purchasing a whole series of boxes linked by a mass of leads, half of which did not work with the other half.

In computing we seem to have turned full circle from the BBC computer systems to new 32 bit systems. The BBC featured all the necessary ports and you simply linked in your overlay keyboard or switches, pressed Shift and Break and off you went.

On the new 32 bit systems there are many questions that must be asked prior to purchase. Which model do you buy? How much RAM? Does it need a RAM upgrade? Does it need a user port fitted? Which type of port - user midi or user analogue? Which operating system - 6.5 or 7, Windows 3.10, RiscOS 2 or 3, Arm 2 or 3 or even 250? The list goes on and

to most people, choosing a new computer system is a nightmare. Having explained the options to many confused callers, SEMERC decided to develop a solution.

Acorn already had a special needs solution based around the A3000 called the Special Access System. The new range of Acorn computers launched during the Autumn term of 1992 had also created interest at SEMERC. It was with these machines in mind that Martin Littler, SEMERC's Director, asked Trish Hornsey and I to specify an Acorn based special system, that would be ideal for use in schools, colleges and centres.

It had to be a complete, ready-to-go system, which could be taken out of the box, plugged in and switched on. It also had to feature a user port for connecting devices like overlay keyboards and a comprehensive range of pre-loaded software. Sensible pricing was also a key issue.

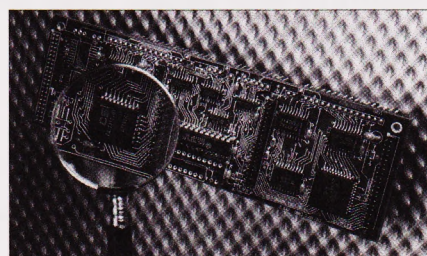
We decided that the A4000 was the Acorn system to go for, because it was the best bargain in the new Acorn range.

The A4000 is a well-built three box computer, featuring a colour monitor, a processor incorporating a disc drive unit and a keyboard with a mouse. The separate keyboard can be positioned for the comfort of special needs users with restricted movement or for younger children.

The computer's Arm 250 processor is 70% faster than an A3000. It has 2Mb of RAM memory and 2Mb of ROM memory containing enhanced, easier-to-use versions of the !Paint and !Draw programs on the A3000. The A4000S also comes with a large 80Mb internal hard disc, which allows you to store the equivalent of 100 A3000 discs or 800 BBC B floppy discs inside the computer! A front loading high density disc drive, can read a wide variety of discs. Sound can be controlled through a volume control on the front of the monitor.

The hard disc was particularly important to us. Once you have used a hard disc computer you will not want to use floppy discs again - not only can you load programs much quicker, you can also avoid disc full problems. The hard disk allows the computer to be set up with a range of ready-to-use software. With this in mind and the low cost differences between the A4000 and the A3020/3010, we decided the A4000 was the system to use.

The user port is still an essential item for most school based computers. It allows connection to overlay keyboards (most overlay keyboard programs don't recognise the serial port), control boxes,

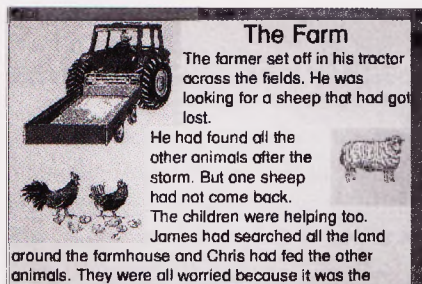


switches and turtles. Using a standard user port on the new Acorn computers limits future expansion, so with the help of Cumana (of the disc drive fame), we specified a new type of expandable user port which Cumana developed into a revolutionary new type of user port, the EMU.

The A4000S contains the EMU user port fitted as standard. This user port board is special - it contains additional sockets to allow the A4000S to be expanded to incorporate at a later stage, SCSI, analogue, MIDI and Cumana Companion (TM) interfaces. This means that other devices can be connected such as a CD-ROM drive, a music processor package and measuring equipment. It is envisaged that third party developers will also provide interfaces to link into the EMU, indeed it has been designed to make it very easy to modify existing interfaces.

Any computer is only as good as its software. The 80 megabyte hard disc on the A4000S has nearly 11 megabytes of pre-installed software. This includes

Phases 3, SEMERC's popular word processing and early desktop publishing package, *My World*, DESCIT's award-winning framework package and a selection of screens for both these programs. *Phases 3* lets you place



pictures with text so we decided to put a wealth of pictures and symbols that may be used within *Phases*, within other programs or on overlays. Brilliant Computing and Widgeit's software is always popular, so we asked both companies to supply working samples of software to include on the hard disc. Widgeit included a selection of activities from its award-winning packages *Choices*, *ScreenPlay* and *GridIT*. *Special Access Utilities* enhance access to the

machine for users with special educational needs.

Getting started with any new computer is always a problem, so we have written a simple spiral bound guide, designed to show users how to do everything, from switching on the machine to using a printer. Other documentation includes the Acorn A-Z for Special Needs, written by staff from SEMERC and the Northern ACE Centre and a Parents' Guide to Computing written by Sally McKeown and Mick Thomas of the National Council for Educational Technology. Program documentation for *Phases 3* and *My World* and the special needs software, !Asp and !Spkbd., complete the package.

Finally, price. The SEMERC A4000S costs £899 (ex VAT) - just £50.00 more than the standard A4000!

Further information

The SEMERC A4000S is available from Cumana and SEMERC Approved Dealers. For further information telephone SEMERC on 061 627 4469.




HONORMEAD SOFTWARE SOLUTIONS

**Specialists in Computer Solutions for
Special Needs, Nursery and Infant Education**





**Now stocking a wide range of
Specialist Software and Hardware**

- Concept Keyboards
- Keyguards
- Switches
- Plus special needs, nursery and infant education software

- TouchWindow
- Trackerball mouse replacement
- Expanded Keyboard

Demonstrations / Advice / Training
0% Finance Available

For free information pack write to:-

Honormead Software Solutions,
Admin House, The Grange, Hospital Lane, Mickleave,
Derby DE3 5DR OR Tel: (0332) 512848 / 510951



Kettering Computer Centre



**NORTHANTS LARGEST
ACORN DEALER**

Extensive range of software,
peripherals and upgrades.

*Special needs and educational
orders welcome.*

Please call us to discuss all
your Acorn requirements.

0536 410070





Allbury Ltd, Midland Bank Chambers,
15/17 High Street, Kettering, Northants NN16 8ST

The Concise English Dictionary for PC users

Malcolm Girling assesses its use for the visually impaired

If you have a couple of sagging bookshelves of Braille dictionaries and an IBM PC compatible computer on your desk, you will soon be able to relieve your storage problems and enhance your writing skills with electronic versions of well-known English Dictionaries. Of course, the Oxford University Press (OUP) have produced the Oxford English Dictionary (OED) on compact disk (CD) for over two years but the average user does not have a CD-ROM drive and does not need the equivalent of a twenty volume dictionary with a near £500 price tag.

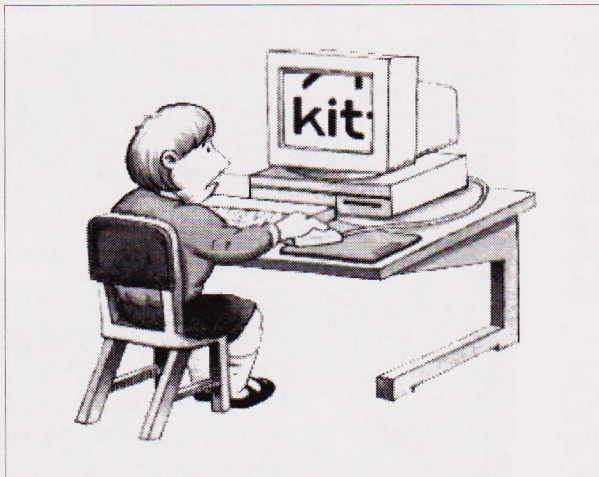
In response to this, the OUP has faithfully reproduced the 1991 print edition of the Concise Oxford Dictionary (COD). The electronic version requires an IBM PC or compatible computer fitted with a standard hard disk drive. No CD-ROM drive is needed.

But before you finally consign your multi-volume Braille dictionary to the dustbin, consider what you require from its electronic counterpart. Most users need just a spell-checker and perhaps a thesaurus for help with the occasional definition. There are many word-processing packages on the market that fulfil these requirements more than adequately, without the need for additional lexical aids.

The COD runs in stand-alone mode, or when used as a memory-resident program, you can search the dictionary whilst using your word processor or other software. In memory-resident mode, the COD occupies half the screen, changing to full screen when used in stand-alone mode, but this can be changed if required.

Looking up words

To look up a word in stand-alone mode, you just type the letters in the input box near the top of the screen. As you type,



a word list is displayed on the right side of the screen and this is updated as further letters are typed. Wildcards '?' and '*' can be used as well. For example, t?p would find tap, tip and top; help** would find all words beginning with help, such as helper, helpless, etc.. Once the required word is highlighted in the word list box, pressing the Enter key brings up the definition in the information box on the left side of the screen. The word list can also be browsed by scrolling through its entries using the cursor keys.

A history list is maintained so you can go back through its entries using the cursor keys, find an earlier definition and read it again.

In memory-resident mode, the COD can be activated using one of five hot-key combinations (to avoid possible conflicts with the other resident software). The word currently at the cursor is automatically transferred to the input box when the dictionary is activated and the word list is displayed. The word can be edited or the word list browsed until the required word is found. Required portions of definition text can be highlighted and copied into a word-processed document subject to a copyright limit of 25 lines.

In use, I get the impression that the COD was designed by a dedicated Wordperfect

user as it has many keystrokes in common with this well-known word processor. Wordperfect users will feel at home but others may not. There are no pull-down menus but the F3 key does bring up a help screen which partly overlays any text on the screen.

Critically speaking

As an electronic dictionary, the COD does have a number of drawbacks:

1. You cannot search for a word using Boolean operators (and, or not) on words in its definition. For instance, you cannot locate a list of monotrems by requesting headwords which contain the words egg and mammal in their definitions.
2. According to the manual, you can locate words which you do not know how to spell. I took this to mean that it would match words phonetically. Unfortunately, this is not the case. The only near match capability is with the use of wildcards '?' and '*'.
3. No Windows version is available. This is not a disadvantage if you are only a DOS user but if you need to use a dictionary with Microsoft Windows applications, the COD is of little use.
4. No thesaurus is included with the COD but a companion electronic version is available for the same price. This brings the total cost for dictionary and thesaurus to £99.00 + VAT + postage. This seems a bit excessive when you consider that a combined COD and thesaurus is available for the Sony Discman at just £29.95 fully inclusive!
5. For the recreational Wordsmith, the COD is very limited. A crossword completion facility with ? and * wildcards is provided, but that's all. It won't solve anagrams and there are no word games. Despite these shortcomings, the COD is

a useful product if you do not expect much more than an electronic copy of an excellent dictionary. It should work with most speech and text enlarging systems, providing you have enough RAM, but configuration can be a bit irksome. Speech users trying to understand the abbreviations used for parts of speech will probably find it near impossible. You can, of course, configure a program like HAL to handle these abbreviations but you will have to buy the print edition of the dictionary to find out what the abbreviations represent since they are not documented in the electronic version! OUP tell me that they have no plans to include such information in electronic versions.

The problem with the COD for visually-impaired users is getting it to work with other memory-resident programs, such as speech systems and large display programs as they all consume precious RAM. You might relieve your bookshelf only to find you are suffering from RAM cram instead! If you use memory-hungry products such as Wordstar, Wordperfect etc., then expect memory problems. Users with 386 machines, DOS 5 and access to a computer buff can ease such difficulties, but consider carefully before you buy. You also need around 4 Mb of free space on your hard disk.

The COD is not generally available through a dealer network, but can be

purchased from Oxford University Press at £49.99 (plus VAT and post and packaging). Telephone OUP on 0865 267979. The thesaurus is similarly priced.

You might also consider the Collins English Dictionary and Thesaurus at around £79.89 plus VAT. This is now available through most computer dealers. The specification appears to be excellent and the package includes both DOS and Microsoft Windows compatible versions. It also works out cheaper than the equivalent Oxford products if you want to purchase a dictionary and companion thesaurus.

Communication matters

*Ann Bernadt reports on
The Initiative on Communication Aids for Children*

The Initiative on Communication Aids for Children (ICAC) has been set up to facilitate and monitor the coordination of augmentative communication services for children across the country, and to bring together professionals from all disciplines, as well as parents, in the assessment and support of children needing augmentative communication systems.

ICAC is funded jointly by the Department of Health and the Department for Education, who recognise that multi-disciplinary work is essential if children's social and educational needs are to be met. The Initiative started in 1992 and will run until 1995.

ICAC will be working very closely with centres who assess children with communication difficulties, either in speaking or in writing, such as the Aids for Communication in Education (ACE) Centres in Oxford and Oldham, the Centre for Micro Assisted Communication (CENMAC) in London, the Communication Aids Centres (CACs) at the Wolfson (London), Southampton and Newcastle, and the Centre for Human Communication in Birmingham. In the



main, children who the Initiative will benefit have physical disability, but communication aids are also useful to children with language disorders and specific learning difficulties.

The GEST programme for I.T. in schools to support children with communication

difficulties is also very relevant to our work. Each LEA has been funded for this from 1991-94 on a per capita basis. The purpose of the funding is to assist in the training for the assessment of children as well as to provide equipment. The ACE Centres and CENMAC are providing advice and liaise with other professionals.

Functions

A key purpose of ICAC is to build on the work done through GEST and to facilitate the working of multi-professional teams in every authority, by ensuring that training is available and by producing guidelines for good practice. The guidelines will initially be put together by a small working party, who will disseminate them for comment. We will also be liaising with training centres across the relevant professions, encouraging them to raise the profile of augmentative and alternative communication at all levels of training and in particular to provide cross-professional training.

ICAC courses

ICAC will be running cross-professional training courses, to complement that already available. Cross-professional in-service training is beginning to take off in a number of places. The Aids to Communication in Education Centres (ACE) and CENMAC run on-going programmes and recently a very successful conference was jointly arranged by the ACE Centres and The College of Speech and Language Therapists. Through a dozen seminars, it covered a number of collaborative methods of working between speech therapists and teachers across the country. Far more intensive, hands-on training is needed for those who will be assessing children.

Assessing the child

It is essential that a child's total communication needs are assessed before a communication aid is suggested. Such assessments should cover social skills especially in initiating communication, receptive and expressive language skills,

including facial expression, gesture and signing (where it is possible), eye pointing and the use of low tech aids, such as communication boards and books. A symbol system, such as Makaton or Bliss, should be considered for a child that has difficulty in reading. The involvement of an occupational therapist and/or



physiotherapist and rehabilitation engineer is necessary in assessing the seating of a child and the best means of access to a computerised aid. For some children, direct access to a keyboard is possible but it can be very slow. For many children, switch access is necessary. A switch can be operated by any part of the body which can produce consistent movement.

Communication aids

There are a number of switches available which can be linked to word-processing programs or even to games on which a scanning device can be used. An assessment needs to be made as to whether a desktop or laptop computer is most suitable for a particular child's needs. A voice can be linked to many programs for the non-speaking child, or to re-inforce writing. A range of computerised aids are available in various sizes, which are primarily speaking aids. Voices are available in digitised speech (recorded speech) on certain aids, and synthesised speech (made up of a phonetic speech

chip), on others. Some aids combine both methods. Most synthesized aids have American accents as American speech chips are used (see Helen Spencer's article - *Special Needs I.T.*, January 1993). For anyone who needs to do sophisticated writing and calculations, and who also needs an aid which can speak, an integrated system is most useful, but expensive.

Training

Once any communication aid has been suggested, it is essential for training to be provided both for the child and for adults who are to work with them, including parents or carers. It takes a long time to learn to use some aids well, but once the technique is mastered the gains in communication are immense.

An issue continually raised is funding for communication aids. CENMAC loans out aids for the duration of a child's school life. Loaning is sensible, as a young person's needs may change. Many other centres arrange for loans of a few months on a trial basis while the child becomes familiar with the aid, but funding must be sought after this time for the purchase of the aid long-term. The Local Education Authority or Health Authority may help, but often charitable funds must be sought. There is no consistent method nationally for the provision or recognition that a communication aid is as essential to communication as a wheelchair is to mobility. Sometimes an aid is suggested and it takes a year or two to raise the money or it is never raised.

The interest nationally in alternative and augmentative communication is growing and people from relevant professions are increasingly working closer and closer together. ICAC will act as an information base and would be pleased to provide more information or contacts across the professions in any given area.

Further information

For further information please contact, Ann Bernadt, ICAC, 336 Brixton Road, London, SW9 7AA.

All the children pictured in this article are supported by CENMAC.



Adjustable height computer workstations

Roger Bates of the ACE/ACCESS Centre, reviews Vari-tech's adjustable computer workstations



In most schools, computer systems are used on fixed height workstations, but unfortunately children do not come in fixed sizes. The Vari-tech adjustable tables offer one solution to this problem, by providing a work-surface that can be adjusted to provide a working height of from 400-910mm and adequate clearance underneath to accommodate wheelchairs. We have been using one of these trolleys for some time and have found its range of adjustment to be sufficient to meet the needs of the variety of children and adults who visit us.

Positioning

Everybody using keyboards and computers should be able to adapt the positioning of the equipment to suit their needs. This is especially true for people with disabilities, who already have enough problems without having additional barriers imposed by having to reach up to a wrongly positioned keyboard or having to strain to look at a badly positioned monitor. By offering a range of adjustment and a choice of full or half

shelf, the Vari-tech trolley will allow the layout and height of the equipment to be varied to suit the person using it. For those wishing to use a Touch Screen or Touch Window, the half-shelf version allows the monitor to be brought to the user's height and close enough for them to reach the screen. If further adjustment is required, an adjustable monitor clamp is available to give more control over positioning.

The Vari-tech trolley, at 1200mm long by 650mm deep, is larger than others, so it may present some problems if used in small or crowded classrooms. However, this size does make it easier to find room for the various peripherals that all computer systems seem to

attract, especially when used by pupils with special needs. The height adjustment is carried out by winding a handle, which can take some effort, but the trolley can be adjusted by one person, even when loaded with a full computer system.

The cost

At £360 the Vari-tech workstation may seem expensive when compared with other computer trolleys, but if it allows for more effective use of your systems, the additional cost may be more than covered. After all, it is essential that everyone using a computer is provided with the appropriate working environment.

Further information

For further information please contact Vari-tech, Unit 7, Premier Mill, Begonia Street, Darwen, Lancs.

Tel: 0254 773524 Fax: 0254 706617

Claris Works for reading and writing

by Jenny Taylor, Curriculum Officer, Northwest SEMERC

Claris Works is an integrated suite of programs including a word processor, a graphics/simple desk top publishing program, a spreadsheet, a database and a communications package. It is also available for PC computers and the files can be transferred between Macs and PCs.

The spell checker, with an option to see the spelling in context, is available in all the modules. This has been recommended as a good spell checker to use for students with spelling difficulties - it recognises quite a number of phonetic spelling errors - kat nome nee cick for instance. There is also a thesaurus to give suggestions of alternative words, a nice way for older writers to expand their vocabulary and make their, or perhaps their teacher's, writing more interesting.

Claris Works is a full blown adult package, but can be quickly tailored to individual needs.

Tips for emergent readers

Here are some suggestions and tips for new users working with emergent readers and writers.

• Use Avant Garde Type

For people who want a plain bold typeface with infant "a"s and "g"s. Sassoon, too, is available on the Mac. This gives a hand-written look and has been shown to be especially useful for children with writing and spelling difficulties.

• Use a variety of type faces

Motivation can be boosted by using different fonts and sizes for different activities - letters to

Giants and mice

John the Juggler
and

My dearest Mother

for example.

• Save files as stationery

We can set up a writing page ready for young writers with, say, double spaced 24 pt Avant Garde type. If this is "Saved

as...." Claris Works Stationery subsequent users will be able to use it as a blank page and save their work in a regular way.

Make a letterhead or let each student design his or her own paper with a header and footer and save this as personal stationery.

Story starters or topic sheets can be prepared with colour pictures and a couple of sentences.

Think about margins and text alignment (centred for lists, wide margins for poems, columns for newspapers, starting half way down the page for adding drawings later, working in two columns in landscape for A5 booklets).

• Use coloured text

Prepare reading materials to be read from screen, varying the text colour to highlight particular words or elements, say purple writing with red "magic 'e's" or lime green digraphs.

Let children choose what colour they want to work in - use the graphics mode if they want coloured paper too.

Use a particular colour for outlining and another colour for filling in.

Let students go through work with a "red pen".

• Learn to use the mail-merge facility

This lets you include information from the database in any other document, names and addresses are the most obvious! You can do this in the graphics program or the spreadsheet as well as the word processor.

Personalise a worksheet for each member of the group by merging their own name maybe in BIG letters - for young children it could be in outline so that they could colour it in or in a font that they can use as a model to copy.

Let students use mail-merging so that they can send the same letter to ten different people or distribute information to all the classes in the school - they begin to experience the power of written communication and that realisation can be tremendously motivating.

If you have a series of work sheets that

have the same format, merge the differing content from a database.

Macros are magic!

One can "record" a series of mouse movements and key strokes. These are assigned a key combination (e.g. option + + M). When option + + M is typed again the "recording" is played back. Note: the option + + X is the format that Claris Works macros use. These key combinations can then be included in overlays so that the macro can be accessed from the overlay keyboard.

Make an overlay with macros for your own use with all the keyboard shortcuts.

Make an overlay to change the colour of text.

Stop press

We have had Claris Works 2 for four days now. A big bonus for people who need help with menus are the on-screen buttons. These can contain a personalised selection of menu items which can be used as an alternative to the pull-down menus.

The most obvious difference to the original package is the addition of a painting module - an excellent basic environment which supports a variety of graded fills, a polygon tool, free rotate, perspective and the capacity to edit, load or save a 256 colour palette.

The word processor has lots of new features including a much needed style option and an outlining facility. The outliner is great fun to play with. It has a selection of styles including legal and ordinary numbering systems, bullets and check boxes with real red ticks that appear when each box is clicked on. Turning the outlining function on at any time allows the user to rearrange paragraphs within a document without having to cut and paste.

Now Claris Works paints too, it really is the only program you need to start reading, writing, drawing and data handling on your Mac.

Claris Works 2 is available from any Apple outlet - the education price is £97 (ex VAT) but cheaper if purchased in bulk or from your local authority.

June 93



access to the mouse.....

960 ArcTracker Trackerball	£269.00
961 ArcTracker Joystick	£350.00
962 PC "Hereward" Trackerball	£365.00
963 PC "Hereward" Joystick	£419.00
964 MacTracker Trackerball	£269.00
965 MacTracker Joystick	£350.00

Replaces the standard mouse on the Arc or PC and Mac giving access to almost everyone. Double click can be selected with a single press. Drag can be turned on and off - no need to hold down a button. Other buttons allow up-down only or left-right only movement of the mouse pointer making menu selection easier for many users. Other features include a pointer speed control, a removable guard and a switch interface for the left and right mouse buttons on the Arc and PC.

access to the keyboard

929 Expanded Keyboard	£475.00
-----------------------	---------

An enlarged, very sturdy version of the standard keyboard with extra features which allow access to the computer to users who find the standard keyboard awkward or impossible.

Users can rest their hands or feet on the steel case and press a key without the frustration of unwanted key presses. Those using toe, mouthstick, headpointer or single finger can perform two or three key operations such as typing capital letters with single presses. An LCD panel enables delays and sounds to be set from the keyboard itself.

This keyboard will work with most Archimedes, PCs, Nimbus etc. We do not recommend it for use with the A3010 or A3020 and would always advise the purchase of an A4000S for special needs users.

Key guards

958 Keyguards for Arc (except A4000)	£38.00
956 Keyguards for Arc A4000 and A4000S	£38.00
957 Keyguards for Arc A4 laptop	£38.00
959 Keyguards for BBC Master 128	£38.00

Rugged metal perforated guards which fasten in place on the Archimedes and allow users to rest their hands and press the keys through the holes.



tame your mouse!

967 SEMERC Mouser (and switch-box)	£47.00
------------------------------------	--------

Essential for young Archimedes users. Turn off unwanted mouse buttons to avoid unplanned presses bringing up confusing menus and worse! The SEMERC Mouser allows any or all of the standard mouse buttons to be turned off. It also allows switch access to these buttons for young or disabled users.

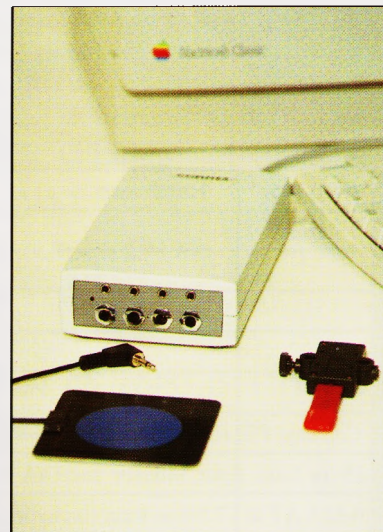
976 QED lever switch LA1	£17.50
--------------------------	--------

The standard lever switch for switch users. Plugs into the ArcTracker, PCTracker, MacTracker, Linx, SEMERC Mouser and Oldham Overlay Keyboard and into standard switch boxes.

switch access.....

976 Concept Linx four switch interface box	£99.00
--	--------

A new idea in switch boxes. The Linx allows switch access to Arc, BBC, Apple Mac, RM Nimbus and PC computers using the same leads as the Concept Universal overlay keyboard. It can be programmed to perform a command using overlay designer software e.g. *Conform* for Archimedes. Please specify which computer you use when ordering. Additional leads for other computers can be supplied for £9 each (see Concept universal section overleaf).



*access to computers for **all** learners*

Concept Universal A3 & A4

Speech and Sound



The new *A3 Concept® Universal* has a strong attractive plastic case, a nice light touch, and it will work with PC, Nimbus, Apple Mac™ as well as with Acorn Archimedes and BBC Computers. All you need to do is make sure your order the appropriate cable (one cable free with each keyboard). Extra cables available at £9 each. The standard cable for the BBC is the parallel cable which attaches to the user port. This is also the best option for the Archimedes although you will have to fit a User Port to these computers before you use your Concept Keyboard or Oldham Overlay Keyboard. The *A4 Concept® Universal* differs from previous A4 Concept Keyboards in that the overlays used are scaled down versions of A3 overlays rather than the old A4 format.

980 A4 Concept Universal £99 plus VAT

990 A3 Concept Universal **£99 plus VAT**

Additional Cables (also for Linx switch box):

970 Parallel cable for BBC & Archimedes £9 plus VAT

971 Serial 9 pin for Archimedes £9 plus VAT

972 Serial 8 pin for Apple Mac £9 plus VAT

973 Pico/Aux bell connector for Nimbus 186 £9 plus VAT

974 Serial 25 pin for PC £9 plus VAT

975 Serial 9 pin for PC £9 plus VAT

Oldham Overlay Keyboard

Our own overlay keyboard is only available in A3 size and connects to the BBC, Archimedes or Nimbus via a user port.

It has some special features for special needs users. It is particularly robust and has both audible and visual indication that a key is pressed. The overlay keyboard can also function as a single switch interface box, allowing access to a wide range of switch software.

922 A3 Oldham Overlay Keyboard £99.00 plus VAT

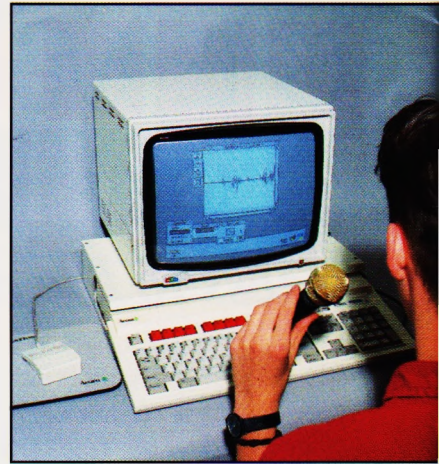
Item No.	Hardware	Qty	Price
Carriage £10	for expanded and overlay keyboards or ArcTracker		
£5 for Linx, Emu, Mouser and Oak Recorder; £3 for LA1 switch.			
Add VAT at 17.5%	to total (including carriage) for UK Orders		

Total Payable

Send LEA Purchase Order or Cheque with Order. If order under £25.00, cheque should accompany order. Make cheques payable to **"Oldham MBC (SEMERC)"**

933 Oak Recorder (Oak Solutions) £39.50

This is a low cost easy to use sound digitiser, consisting of a microphone which plugs into the printer port and software. The software allows you to listen to and edit the sound. Once digitised the sounds can be saved to disc and then used with other programs such as *Genesis*, *Maggie*, *Storyboard* or *Optima*.

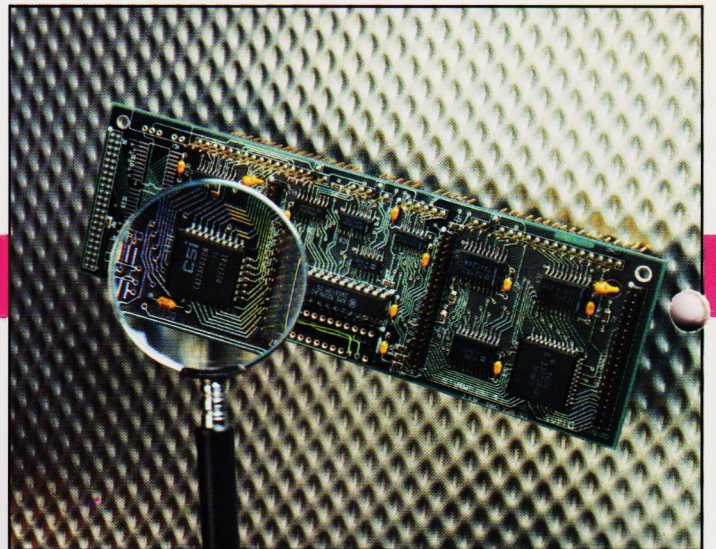


A User Port and more

EMU with User Port (Cumana)

£50 

Developed for the SEMERC A4000S by Cumana, the EMU (Expandable Multi-Use Interface) comes fitted with a User Port (for overlay keyboards etc.) as standard. It can be connected by a single expansion slot to the A3000, A3010, A3020 and A4000 allowing the connection to up to seven different interfaces. The EMU's baseboard can be upgraded to accomodate IDE, Midi, Analogue, SCSI, and Cumana Companion™ as well as taking full length boards from other suppliers.



Name
Position
LEA
Telephone
Address
Post Code (vital!!)

Northwest SEMERC, Fitton Hill CDC
Rosary Road, Oldham OL8 2QE
tel: 061 627 4469, fax: 061 627 2381

SEMERC A4000S

The complete system for users with special needs



Acorn Computers, in partnership with SEMERC and Cumana, is pleased to bring you the A4000S – the complete system for users with special needs.

Price

A4000S with standard Acorn colour monitor – £899
(plus £10 delivery per system) excluding VAT

A4000S with multiscan Acorn colour monitor – £949
(plus £10 delivery per system) excluding VAT

Order Point

To order, contact Cumana on 0483 503121 (Fax: 0483 451371) or to obtain details of your local participating dealer call 081 847 7888.

The A4000S is the Acorn computer system for special needs, devised and developed through a partnership between Acorn Computers, SEMERC and Cumana.

USER BENEFITS

- The system is fully configured and ready to use after plugging in.
- Award-winning* software is pre-installed, including Phases 3, My World, special needs utilities and programs from Brilliant and Widgit.
- The revolutionary Cumana EMU interface with standard user port allows existing equipment, such as overlay keyboards, switch boxes, control equipment and turtles, to be connected immediately using existing leads.
- The EMU interface also permits further expansion.
- Comprehensive support literature is supplied, including guidebooks and starter guide.
- Helplines are available from Acorn, SEMERC and Cumana and support from a nominated dealer:

Acorn Computer (Special Needs department) – Tel: 0223 254414

SEMERC – Tel: 061 627 4469

Cumana – Tel: 0483 503121

The complete A4000S package comprises:

The Acorn A4000 computer, with separate keyboard, 80MB hard disc and colour monitor.

Cumana EMU (Expandable Multi-Use) interface with user port – an expansion board enabling overlay keyboards, switch boxes, control equipment and turtles to be connecting using existing leads. Further expansion for midi, analogue, SCSI, IDE, Companion and other third-party boards is also allowed.

Phases 3, the award-winning* wordprocessor from SEMERC, with a range of support screens.

My World, Derbyshire LEA's highly acclaimed award-winning* content-free program, with support materials covering a wide range of ages and curriculum areas.

Picture resources – hundreds of pictures and symbols in Paint and Draw format for use with many programs, including Phases 3 and My World.

Six programs from Brilliant in limited-option working versions – Mini Alex, Switch On, Pairs, Microship, Painting and Frog.

TriLink files from Widgit, a range of activities based on Eric Carle's story *The Hungry Caterpillar*, made with Screenplay, Gridit and the award-winning* Choices.

Special Needs utilities: ASP – a program giving switch users access to software, along with a range of specially prepared templates for Phases and My World; !Spkbd – a program which allows for the keyboards to be configured to individual users and for mouse emulation from the keyboard. MouseSwitch – SEMERC's new mouse/keyboard emulator; !Flashbell, !Flasher and !Pointer – utilities for sensorily impaired users. (The operating system also includes the large screen mode 22).

A-Z of Special Needs for Acorn Computers – a book of useful current information for those using Acorn computers with learners with special needs.

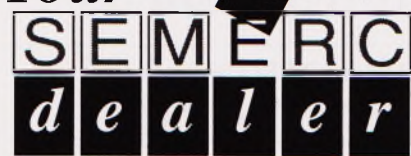
Computers and Your Child – A Parent's Guide – specially written by Sally McKeown and Mick Thomas of the National Council for Educational Technology.

Beginner's starter guide specially devised by SEMERC's training department to help you get going with your new A4000S computer.

A comprehensive user guide and applications guide, with Program documentation for the pre-installed software and resources.

*Phases and My World received special awards at BETT '92. My World support materials and Choices received Educational Computing & Technology awards at the Micros for Special Needs Exhibition 1992.

Your



Avon

C. J. Computing
57 Westbury Hill
Westbury on Trym, Bristol
BS9 3AD 0272 624553
fax 0272 624553

Cambridgeshire

Newton & Brewer Technology
Unit 16 Sedgeway Business Park
Common Road, Witchford, Ely
CB6 2HY 0353 666011
fax 0353 668737

Cheshire

3SL Limited
501-511 Crewe Road
Wheelock, Sandbach, Cheshire
CW11 0QX 0270 761516
fax 0270 768200

Cumbria

Cumbria Software Systems Limited
Unit 3A Townfoot Industrial Estate
Brampton, Cumbria
CA8 1SW 0697 73779
fax 0697 73818

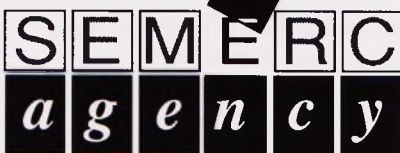
Derbyshire

Honormead Software
Admin House, The Grange
Hospital Lane, Micklegate
Derby DE3 5DR 0332 512848
fax 0332 512867

Dorset

Lansdowne UK Ltd
Alder Hills Park
16 Alder Hills, Poole, Dorset
BH12 4AR 0202 743336
fax 0202 737411

Your



Australia

East - West Computers Pty Ltd.
P.O. Box 250
Riddells Creek
Victoria 3431
phone: 061 54 28 6314

Belgium

Computing Solutions NV
Heistraat 143, Belgium - 2610
Wilrijk, HRA 286947
BTW BE 445849711
phone: 03 830 13 33

These **SEMERCdealers** have a particular interest in special needs and have received three days of residential training from SEMERC and the ACE/ACCESS Centre.

Each **SEMERCdealer** has special access devices like ArcTrackers, keyguards and expanded keyboards in stock so that you can 'try before you buy'.

When you order an A4000S from Cumana you can nominate one of these dealers for support or you can go directly to the dealers for any item in the SEMERC range.

Essex

Le Computer
PO Box 29, Chelmsford, Essex
CM3 1QS 0245 362225
fax 0245 362048

Greater Manchester

Computer Systems
22 Glynne St.
Farnworth, Bolton
BL4 7DY 0204 794063
fax 0204 794090

Fairhurst Instruments Ltd
Dean Court, Woodford Road
Wilmslow, Cheshire
SK9 2LT 0625 525694
fax 0625 537284

LMR
17a Marsland Road, Sale, Cheshire
M33 3HP 061 962 8872
fax 061 962 8872

Hertfordshire

Cannon Computing
Whitegate, Dunmow Road
Hatfield Heath
Bishops Stortford, Hertfordshire
CM22 7ED 0279 730800
fax 0279 730809

Lincolnshire/Cambridgeshire

Daval Electronics
921 Lincoln Road
Walton, Peterborough
PE4 6AE 0733 325121
fax 0733 324091

Merseyside

Data Exchange Ltd
Exchange House,
62 Wood Street
Port Sunlight, Wirral
L62 4UZ 051 644 7770
fax 051 643 1217

Northamptonshire

Kettering Computer Centre
Allbury Ltd, 15-17 High Street
Kettering, North Hants
NN16 8ST 0536 410070
fax 0536 415321

Sheffield

DPM Electronics
Computer Sales and Maintenance
124 Handsworth Road
Handsworth, Sheffield
S9 4AE 0742 611996
fax 0742 617220

Somerset

Sharbrook Systems
18 The Crescent, Taunton,
Somerset
TA1 4EB 0823 334383
fax 0823 323093

Suffolk

Lindis UK
Wood Farm, Linstead Magna
Halesworth, Suffolk
IP19 0DU 0986 85476
fax 0986 85460

Tyne and Wear

HCCS Associates Ltd
575 - 583 Durham Road
Engine Lane, Low Fell
Gateshead, Tyne and Wear
NE9 5JJ 091 487 0760
fax 091 491 0431

West Yorkshire

Eltec Computers
2-4 Campus Road
Listerhills Science Park, Bradford
BD7 1HR 0274 309999
fax 0274 731716

Resource Facilities '92
Spruce House, Upper Washer Lane
Halifax, West Yorkshire
HX2 7DR 0422 365935
fax 0422 346388

For SEMERC service, software and access devices overseas

Finland

OY FASTCUT Limited
Mannerheimintie
144 A 19-20
00270 Helsinki 27

New Zealand

Winsley & Hall Computers
1/1 Rata Street, New Lynn
P O Box 8790 Symond Street
Auckland
phone: 09623 0887

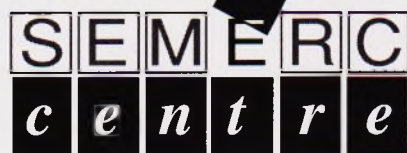
New Zealand

Special Education Services
P.O. Box 5147
Dunedin
phone: 03 434 7763

Sweden

Information Technology Services
Sjolullsgalan 3
S-602 28 Norrköping
Sweden HB
phone: 011 127756

Your



for local service

Over thirty LEA Computer Centres have been designated **SEMERCcentres**. As part of the Special Needs I.T. support they supply to schools, these Centres can often offer SEMERC software and access devices on favourable terms.

Each centre can also designate schools to receive the **SEMERCinform** service as part of the service they offer.

The Centres operate differently, but if you are lucky enough to work in one of the LEAs or ELBs listed below you should certainly find out what they have to offer.

Essex EDAS

South West Essex CDC
Barn Hall, Alderney Gardens
Wickford
SS11 7JZ 0268 769464

Belfast ELB

40 Academy Street, Belfast
BT1 2NQ 0232 329211 Ext 4055

Birmingham Computing Centre

Martineau Education Centre
Balden Road, Harborne
Birmingham
B32 2EH 021 428 1167

Bolton IT Centre

Castle Hill Annexe, Castleton
Street
Bolton, Lancashire
BL2 2JW 0204 31988

Buckinghamshire Ed. Offices

Aylesbury, Buckinghamshire
HP20 1UZ 0296 383376

Bury Technology Support Centre

Professional Development Centre
Seedfield Site, Parkinson St. Bury
BL9 6NY 061 763 1464

Calderdale I.T. Dept.

Teacher's Centre, Bermerside Hall
Skircoat Green, Halifax
West Yorkshire
HX3 0RZ 0422 362103

Cambridge CITE

The Green, Brampton
Huntingdon, Cambridgeshire
PE18 8RF 0480 52128

Cleveland Ed. Computing Centre

Prissick Base, Marton Road
Middlesbrough, Cleveland
TS4 3RZ 0642 325417

Clwyd IT Support Unit

Bryn Estyn Education Centre
Erlas House, Bryn Estyn Rd.
Wrexham, Clwyd
LL13 9TY 0978 310000

Croydon Advisory Service E665

Davidson Professional Centre
Davidson Road, Croydon, Surrey
CR0 6DD 081 655 1299 Ext 171

Cumbria Citac Project

5 Portland Square
Carlisle, Cumbria
CA1 1PU 0228 812696

Derbyshire DESCIT

Chatsworth Hall
19 Chesterfield Road
Matlock
Derbyshire
DE4 3FW 0629 580000 x6852

Devon Babbage Centre

Dartington College of Arts
Dartington Hall
Totnes, Devon
TQ9 6EJ 0803 862224

Durham Microtechnology Centre

New College, Nevilles Cross Site
Darlington Road, Durham
DH1 4SY 091-386-2421

Guernsey E.D.C.

Granville House
Mount Durand, St. Peter Port
Guernsey, C.I. 0481 720654

Gwynedd Computer Unit

Uned Gyfrifiadurow
Maesincla, Caernarfon
Gwynedd
LL55 1RS 0286 677686 Ext 131

Hereford and Worcester I.T.S.

Finstall Centre
Stoke Road, Bromsgrove
B60 3EN 0527 570566

Kirklees TVEI Centre

Deighton High School
Deighton Road, Deighton
Huddersfield
HD2 1JP

Lancashire CP Centre

103 Preston New Road
Blackburn
BB2 6BJ 0254 682244

Leeds Edit Centre

West Park CDC, Spen Ln., Leeds
LS16 5BE 0532 782762

Liverpool L.I.T.E.C.C

Educational Development Centre
Dulcie Cottages, Riversdale Road
Liverpool
L19 3QN 051 225 8128/7

Manchester Inner City Comp. Ctr

Birley Centre, Chichester Rd.
Hulme, Manchester
M15 5FU 061 226 9154

North Yorkshire County Council

Room 600
County Hall, Northallerton
DL7 8AE

Oldham IT Department

Fitton Hill CDC
Rosary Road, Fitton Hill, Oldham
OL8 2QE 061 627 0565

Redbridge SERC

Little Heath School
Hainault Road
Little Heath, Romford
RM6 5RX 081 597 7848

Rochdale.

P O Box 70, Municipal Offices
Smith Street, Rochdale
OL16 1YD 0706 47474

Sefton Advisory Teacher Base

Gores Lane, Formby
L37 3NY 0704 978653

St. Helens Rivington Staff Dev Ctr

Rivington Road, St. Helens
Merseyside 0744 612737

Tameside IT Centre

Lakes Rd., Dukinfield, Cheshire
SK16 4TR 061 330 1375
031 343 5937

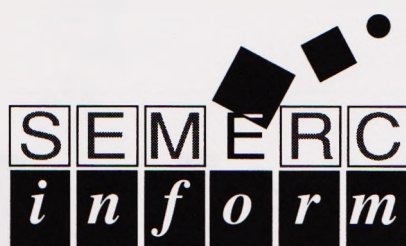
Western ELB Microtech Centre

Old Mountfield Rd, Omagh
Co. Tyrone, N. Ireland
BT79 7EG 0662 246729

Reader Enquiry Service

Put a ring around the appropriate reader enquiry numbers for more information:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Please send the new SEMERC <i>Archimedes</i> Catalogue now																18
Please send the new SEMERC <i>Nimbus/PC</i> Catalogue in October																19
Please send the new SEMERC <i>Apple Mac</i> Catalogue in October																20
Please send the new SEMERC <i>BBC Master</i> Catalogue now																21
Please send tickets for the <i>Micros for Special Needs Exhibition</i> in October																22
I would like to receive SEMERC inform service detailed below (enclose cheque)																23



This is a new service for those who would like to be kept informed of new resources and approaches to the use of computers with learners who have Special Educational Needs.

- ◆ Three **termly SEMERCinform** mailings
- ◆ Discounts of 5% on SEMERC software and hardware
- ◆ **Three termly issues of *Special Needs I.T.***
- ◆ Advance information and tickets for *Micros for Special Needs Exhibition* each October
- ◆ Advance information and tickets for the *BETT Exhibition* each January
- ◆ Full details of SEMERC courses and conferences a term before they happen
- ◆ SEMERC catalogues and fliers as soon as they are published

How to receive the SEMERCinform service

Your LEA Computer Centre (see previous page) may be able to supply you with a **SEMERCinform** service as part of the support they offer. Alternatively, you can join directly. Send a cheque for £12 (no VAT) payable to Oldham MBC (SEMERC) and fill in the form below.

your name

your post, position or title

address of school, institution or service

post code (vital)

telephone number



(Please fold)

111

**Northwest SEMERC
FREEPOST 5294
OLDHAM
OL8 2BR**

(Please fold)

(Please seal here)



ENHANCED CAPABILITY

Special Needs computing made easy

Acorn Special Access Upgrade Pack

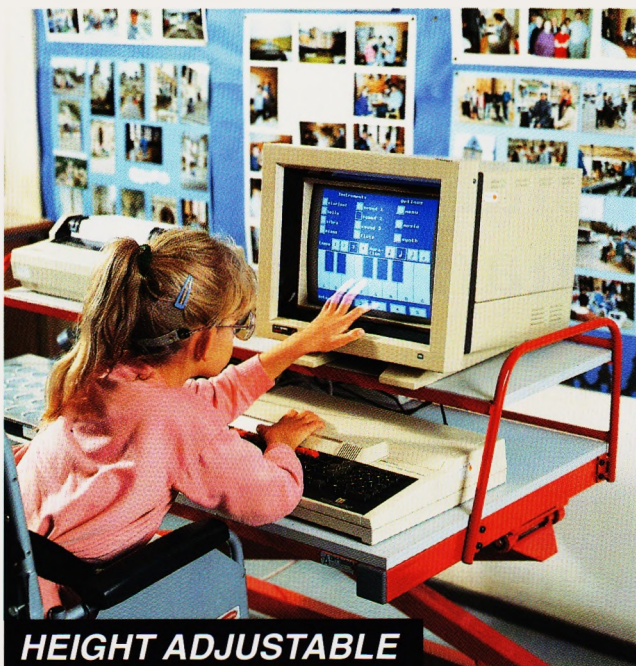


- Designed to tailor Acorn Archimedes RISC OS computers for almost any special needs.
- Fitted by the dealer when you purchase your computer, the Acorn Special Access Upgrade Pack presents an easy solution to special needs requirements.
- User and Analogue ports allow the use of Concept or Acorn Special Access Upgrade Pack overlay keyboards and switches, as well as supporting additional software capabilities.
- Acorn A-Z of Special Needs, compiled by Northwest SEMERC and the Northern Ace Centre, is an invaluable guide to the wide variety of software and hardware that is available to those in the special needs field.

**Call 0800 400 800
and ask for Acorn Special
Needs Information Pack**

Acorn

The vari-tech Solution TO COMPUTER DESKING AND SPECIAL NEEDS

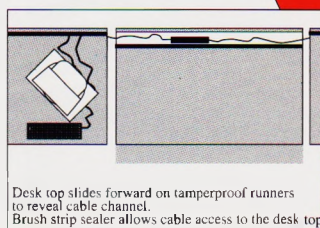


**HEIGHT ADJUSTABLE
FOR SPECIAL
EDUCATIONAL NEEDS**

Correct posture is often hard to attain by disabled people using normal work benches. With our height adjustable work units it can be achieved in seconds using a simple winding handle. This is removable to make the units tamper proof. This simple method of adjustment gives millimetre accuracy and allows units to be used for various activities by different people, achieving optimum efficiency. The open end at one or more sides allows every current UK wheelchair to be accommodated comfortably. This, coupled with over 500mm of adjustment means that children from 3 years old to adult can use the same unit in complete comfort.

We also manufacture a full range of height adjustable workbenches for Woodworking, Metalworking, Home Economics, Science and Art. Similarly, Vari-tech produce changing beds and ranges of tables for classroom, dining room and office use.

FOR DETAILS OF VARI-TECH
SOLUTIONS TO COMPUTER DESKING
AND SPECIAL NEEDS, PHONE OUR
ADVICE LINE ON: 0254 773524.



Desk top slides forward on tamperproof runners to reveal cable channel.
Brush strip sealer allows cable access to the desk top

**THE
NEW
CABLE
TIDY
SYSTEM**

Developed to facilitate the ease of networking, the Benching System units all have removable blanking plates, allowing wires to pass from desk to desk. To enable the multiple positioning and connection of desks there are four different linking units available.



There are two mobile Trolley models, together with a comprehensive range of accessories, allowing all needs to be catered for. All Trolleys are supplied as standard with integrated handrails and rubber wheels for shock absorption and mobility.

**Introducing the new
Cable Tidy System
units starting from
£86**

vari-tech

Vari-tech, unit 7, Premier Mill, Begonia Street, Darwen, Lancs. BB3 2DP

Reader Enquiry No: 16

Tel: 0254 773524 Fax: 0254 706617