going places

SWITCH OPERATED PROGRAMS FOR CHILDREN:BBC B,B+,128

widgit Software

GOING PLACES is a series of switch operated programs for young children, and children with special needs.

The programs were developed in PROJECT CHRISTOPHER at
The Hospital for Sick Children
Great Ormond St., London.
By Tina Detheridge, Widgit Software
and Jo Douglas, Principal clinical psychologist, Great Ormond Street Hospital.

Published by
WIDGIT SOFTWARE

INTRODUCTION.

This suite of games and activities is suitable for the 3-6 age range, although wider application is possible for the child with special needs. The aim of these programs is to enable the development of a wide range of educational skills within an overall context. The context chosen is that of a 'day out'. The child can decide where to go, what to wear and what to take with them. Then there is the journey followed by two games to be played for each destination. These are different for each destination chosen. Finally there is a journey home again.

An opportunity is thus provided for the child to work through a series of activities on the computer that are linked together and have meaning, and so encourage language development and memory skills. The games are specifically designed to allow the opportunity to discuss and plan choices and decisions with the child.

Most games have three different levels of difficulty allowing scope for individual child development within the pre-school and lower infant range.

The suite has been designed with the physically handicapped child in mind and can be used with a wide variety of input devices.

LOADING.

- Plug in any input device you wish to use.
- Switch on the BBC B or Master Computer.
- Insert a disc in the drive.
- Hold down SHIFT and tap the BREAK key.

The title page for the disc will appear on the screen. You will be asked to make a number of choices as described on the next pages. Pressing SPACE moves the highlight, pressing RETURN selects it.

INPUT DEVICES

The program will work with any of a wide range of input devices including the standard qwerty keyboard. The input device is selected in the menu program.

NOTE: It is necessary for a switch to be pressed and RELEASED before the input will be acted upon. If nothing appears to happen check that a switch or joystick has not been left on the ON position.

Acceptable devices are:

* Any single switch connected to the USER PORT via a switch interface (such as that supplied by Interface Designs).
* Analogue joystick. (Connected via the analogue socket on the back of the computer).
* Special Needs Joystick - supplied by Interface designs - select user port for this.
* MicroMike
* Concept Keyboard - operating as a SINGLE SWITCH - i.e. press anywhere on the board for an input.

SINGLE OR DUAL SWITCH OPERATION

Choices open to the child are denoted by a CURSOR on the screen surrounding the option. There are two ways of making choices.

DUAL SWITCH MODE.

In this mode one input advances the cursor in a cyclic manner (called SCANNING). A second input SELECTS at the current cursor position.

SINGLE SWITCH MODE.

Here the cursor advances automatically after a time interval called the SCANNING RATE. When the cursor is in the correct position the input is pressed to SELECT. If you choose 'single' input you will then be given the opportunity to set the scanning rate.

SUMMARY TABLE

DEVICE	DUAL SWITCH		SINGLE SWITCH	PLUGS INTO
	SCAN	SELECT	SELECT	
Keyboard	SPACE BAR	RETURN	Either	----
Joystick	Horizontal	Vertical	Either	Analogue Port
Fire Buttons	Button 1	Button 2	Either	Analogue Port
Micrex Adapter	Switch 1	Switch 2	Either	User Port
Micro-mike	-----	-----	Noise	Analogue Port
Concept Keyboard	-----	-----	Touch	User Port

THE MENU

Throughout the menu press SPACE to move the highlight and RETURN to select the higlighted choice.

In the menu you must:

1 Select the type of input
2 Select single or dual input - (except for micromike and concept keyboard which are single input only)
3 Select the delay (scanning rate) if you choose single input
4 Select the game
5 Select the starting level for that game.

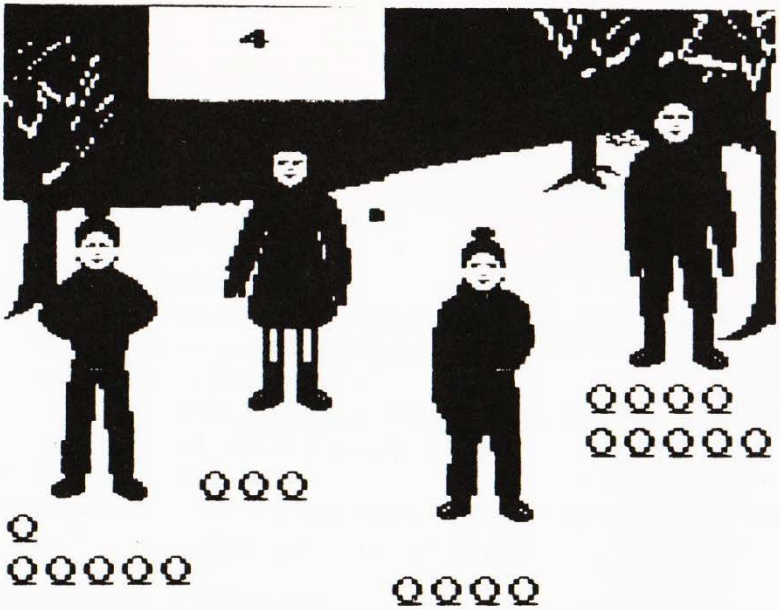
KEYBOARD CONTROLS

Esc	Return to the MENU
Q	QUIET - turns the sound off
L	LOUD - turns the sound on
f1 - f4	Changes level during play
f6 - f9	Changes the start or destination- (Applies on Disc 1 - "What shall we wear". The whole of Disc 2, and "Going Home" on Disc 6. f6-Park in the snow f7-The beach f8-The Party f9-The Shops

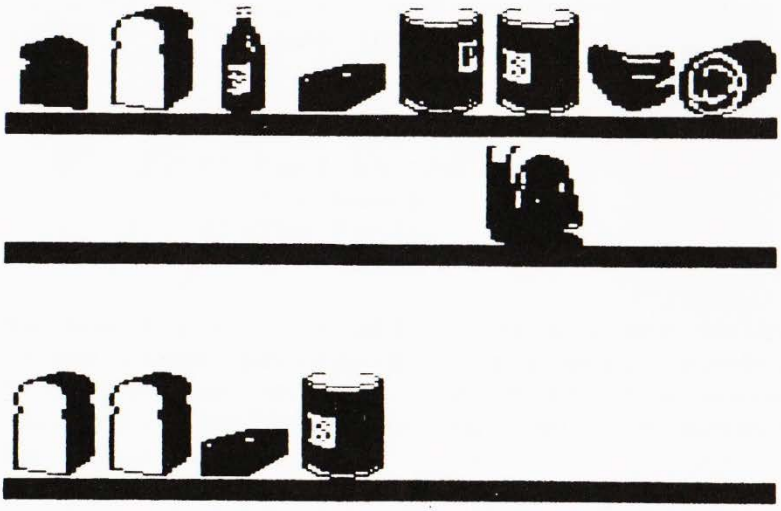
Keyboard controls will always override any other input device, giving overall control to the operator helping the child. The above controls work whenever an input is expected by the computer.

THE PROGRAMS

Disc 1:	Where shall we go?	
	What shall we wear?	
	What shall we take?	
Disc 2:	The journey	
Disc 3:	The Shops:	Shopping List
		Shopping Letters
Disc 4:	The Beach:	Musical Statues
		Beach Toys
Disc 5:	The Party:	Hunt the Ball
		What's in the Parcel
Disc 6:	The Park:	Snowballs
		Snow Tracks
		Going Home



GOING PLACES: Disc 6: Snowballs



GOING PLACES: Shopping List

DISC 1.

1. WHERE SHALL WE GO?

There is a choice of four destinations on the day out: the shops, the beach, a party, or a park in the snow. Each of these places appears on the screen showing how the puzzles build up. They stay on the screen until the destination is chosen giving ample time for discussion. SELECT the destination when the cursor is around the required picture, and press SELECT again to start the game.

Each picture has one piece correctly placed; the missing ones are muddled to the left of the screen. SELECT the missing piece indicated in turn to complete the picture(s).

f1: One picture three missing pieces.
f2: Two pictures, 6 missing pieces.
f3: All four pictures, 12 missing pieces.

This game encourages observational skills as well as matching, together with left/right and up/down orientation. **If a wrong selection is made the piece is shown in its wrong position until the next input.**

2. WHAT SHALL WE WEAR?

The choice of clothes to match the destination provides a wide range of language stimulation and discussion. A picture of the chosen destination is shown with a child dressed appropriately to prompt discussion. Press a switch to start the game. There is only one level of play. If you wish to change the destination, use f6-f9. **This can also be used to restart a game.**

A child in underclothes is shown on the left of the screen. The body is divided into five sections, and for each section there are four choices. Each section is shown in turn and one picture is selected. A lot of fun can be had by muddling up the clothes. If help is needed the correct choice is shown again at the end.

Memory, matching and sequencing skills are important in this game, and it allows a wide range of vocabulary to be used relating to parts of the body, clothes, and to the weather and destinations.

3. WHAT SHALL WE TAKE WITH US?

The four destinations are shown with objects that might be needed. This allows the opportunity for discussion and remembering.

Press a switch to start the game.

f1: Five pictures are shown with one at the top of the screen. The places of the four lower ones should be memorised. On the next input the lower pictures are covered. Find the one that matches the top picture. Only one object is covered at a time.

f2: Eight pictures are shown. Memorise their positions then press a switch to cover them up. The object of the game is to find the matching pairs by uncovering two pictures at a time - the standard pelmonism game.

f3: As level two but this time the pairs are functionally related instead of matching.

DISC 2.

THE JOURNEY.

There are three games in the journey in increasing order of difficulty. They can be played in SINGLE SWITCH MODE only. If you try to play in dual mode (e.g. by changing discs and pressing ESC) the game will automatically set single switch mode.

The games are based on board games using counting and spatial estimating. They can be played by one or two players. When there are two players the second player can can use the keyboard or use the second input device. The first player has blue vehicles and the second has red.

The number of moves per turn is SELECTED from the cycling counter on the screen. If one player lands on another, that turn is disallowed.

At the end of the game the chosen destination is shown on the screen. This destination can be changed during play by pressing f6 - f9.

game 1: There are 21 squares in the route, some of which are red. If a vehicle lands on a red square it will change to a different form of transport. There is a maximum of four moves per turn, which is indicated by both numerals and dots.

game 2: There are 26 squares in this visually more complex route. There are also yellow short cuts and black back tracks (rather like snakes and ladders). On the route, bus stops, car park signs, a station and a harbour are shown to indicate the transport to be found. There is a maximum of four moves per turn indicated by numerals and dots.

game 3: This route is even more complex with a maximum possible 56 squares to the route. Apart from the yellow short cuts and the black back tracks, there are two special short cuts across the sea. If a player lands on one of these marked by a purple number 3, or a purple number 5, then the counter changes to purple. Match the number on the counter to that on the square to access the short cut. There are a maximum of six moves per turn, denoted by numerals only.

These games encourage visual tracking and anticipation. There is a lot to talk about: transport, signs and maps as well as the various places passed on route. The child can play completely randomly or plan his route carefully and choose the most advantageous moves. The adult can choose to lose if appropriate. Basic counting skills and numeral recognition are practised. The element of competition may be important for the older child.

DISC 3.

1. SHOPPING LIST

A memory game with a visual shopping list.

A number of items of food are shown. Try to remember them. When ready press a switch to see the supermarket shelf. Move the snail along to be under the item wanted and the press SELECT. The item will then move to the cash point. When the correct number of items have been SELECTed they scroll off and are then shown under the original list for comparison.

f1: Two items in the shopping list and four on the shelf.
f2: Four items in the shopping list and eight on the shelf.
f3: Three different items in the list, but there may be more than one of each item. Eight items on the shelf.

This game involves memory skills, both visual and verbal. (Some children remember the name of an object rather than the picture). Visual attention is important as well as matching skills.

2. SHOPPING LETTERS

This is a version of I-SPY. Four different shops are visited: a grocers, an electrical shop, a toy shop and a clothes shop. (In level 3 it is one supermarket with all the types of items mixed up). Articles from the shop are displayed. Find the article beginning with the letter displayed at the bottom of the screen.

Eight objects are to be selected in the whole game, two from each type of product.

f1: Four objects in each shop, each beginning with a different letter.
f2: As level 1, but there may be more than one object beginning with the same letter.
f3: Twelve objects displayed together, each beginning with a different letter.

This game can be played in three ways: The adult can say the sound of the letter and the names of the objects, OR just the letter sound can be given, OR the child can be encouraged to recognise the letter shapes in early reading stages.

DISC 4.

1. MUSICAL STATUES

This is a game to test and develop visual attention and concentration. Spot the last sea creature moving after the music has stopped. There are six different sea creatures, each of which can be easily identified to help the child pay attention.

f1-f3: have progressively shorter times between the creatures stopping so that greater attention is required.

2. BEACH TOYS

A busy crab has to collect the things left on the beach. He cannot go back on his tracks and when he has collected the four items he must join the other crabs to the right of the screen.

f1: Collect the four objects in any order.
f2: Collect the objects in the order indicated in the lower part of the screen.
f3: As level 2, but the arrangements tend to be more difficult.

This game encourages forward planning and spatial reasoning. Direction control is important for the younger child and this can be encouraged by saying the direction as the child moves the crab. Memory and sequence are practised in the higher levels.

If the child gets stuck during a game: Press 'R' to REPEAT the SAME GAME.

DISC 5.

1. HUNT THE BALL

This party game is like 'Hunt the Thimble' using a ball instead. Spot the ball hidden in the child's bedroom. The box CURSOR will move in the direction of the arrow. As soon as it is located over the ball a tune will play - and watch the Teddy.

- f1: The ball is coloured magenta to distinguish it from the other objects in the room.
- f2: The ball is in red and so is more difficult to spot.
- f3: As level 2, but with some extra, more difficult hiding places.

This game tests visual concentration as well as observation. It is exciting and motivating to children. Help may be needed initially, particularly in control of the cursor.

2. PARCELS

This game is one of guessing which parcel contains the present. The cursor moves in the direction of the arrow, which changes direction in the normal scanning manner. When the cursor is located over the correct parcel the child is shown how the shape of the parcel matches that of the present. Some balloons are won which build up around the screen to make an attractive party picture. There is a special reward when all the balloons have been won.

- f1: One present is shown with two parcels.
- f2: One present with four parcels.
- f3: Either one present with four parcels, or one parcel with four presents.

DISC 6.

1. SNOWBALLS

Four children are in the park playing snowballs. Identify the child who has the most snowballs, or who has a particular number of snowballs. There is the option to choose 'most' or 'pick the number' at all levels. This provides the opportunity for estimating as well as counting. Pick the number option has the required number shown at the top of the screen. In levels 1 and 2 this is shown in numerals and snowballs, and in level 3 it is in numerals only. There are five goes to each game, then watch what happens.

f1: Most: maximum of 5.
    Number: maximum of 3.
f2: Most: maximum of 5.
    Number: maximum of 5.
f3: Most: maximum of 10.
    Number: maximum of 10.

2. SNOW TRACKS

This is a snow game about footprints. Six different animals and two people are matched to their feet and to their footprints.

The program involves a progressive matching tasks so that the child learns the footprints of different animals.

First the animal is shown and a selection of feet. When that has been correctly selected the foot is shown of the same animal with a collection of footprints. The final selection relates the footprint to the animal itself. When the three parts have been successfully completed the animal walks across the screen.

f1: One animal, two choices.
f2: One animal, four choices.
f3: Four animals and four choices all have to be lined up

These games involve shape association as well as memory. Discussion about footprints could lead on to further practical work on hand and finger prints.

3. GOING HOME

These are maze games to get back home from the four different original destination. The destination can be changed by pressing f6-f9. The game is restarted if one of these function keys is pressed.

A van is shown with an arrow indicating the direction of travel. This scans in the normal way. The van can go forward, backward, left or right one step at a time, but it cannot stray off the road.

- f1: There are four separate routes home which are not connected and provide a simple maze for the child to follow.
- f2: Each of the four main routes has one connection with its neighbour so that the child can travel across the screen with a choice of different paths.
- f3: The maze is the same as level 2 with the addition of four petrol pumps. The van must collect petrol from **each** pump before it can get home.
- f4: This is an extension of level 4 in that there is only one path into the house rather than four.

This game encourages visual tracking and planning as well as orientation. Left/right discrimination is practised.

NOTES FOR PARENTS

These programs are designed primarily for children with special needs, particularly those with physical disabilities who need the use of a switch input. It is particularly important for these children to have the opportunity to play games and control the computer themselves, but they will need your presence to help and encourage them. Most young children left on their own with a computer will quickly lose interest or forget what they are supposed to be doing, so use the time as one for interaction and discussion with your child.

You should always start your child on an easy level so that they have a chance to succeed and enjoy themselves. Do not encourage them to play games that are too hard for them or they will lose interest and motivation.

The games have an educational as well as a fun element, and you can use them as a starting point for looking at books or doing other activities at home. The programs are designed to stimulate language. Even if your child cannot talk it is vital that you talk to him and stimulate his ability to listen and to comprehend language.

When you start to use this suite of programs, look through them yourself first and choose a couple of games that you think your child would enjoy and do easily. This will allow him to become familiar with using the computer and his switches, as well as with the particular controls of these programs. Later on you can use the links between the programs for a more structured sequence of activities.

You may find that your child has certain favourites that he will want to play continuously and you will need to introduce the other games in a gradual way. Do remember that if your child is physically disabled then operating the computer may be his major way of controlling events around him - he may have little opportunity for spontaneous play - so let him choose what he wants to do. He may enjoy playing with the games incorrectly and experimenting with wrong answers, but this is all part of learning and play.

BLANK

BLANK

Developed in PROJECT CHRISTOPHER.
Funded by Department of Trade and Industry as part of the Concerned technology program.

Conditions of Sale:
These discs are sold subject to the agreement that they will not be re-sold, hired or copied without the publisher's consent.
Copying of these programs is permissible for the individual user or establishment for use by the same.
Extensive copying will only restrict the possibility of further material being produced.

Quacks Booklet Printers, 7 Grape Lane, Petergate, York, YO1 2HU. Tel. (0904) 635967