

Activity 16 Creating an environment for switch access

This activity assumes you have already followed Activities 9 and 10, and are familiar with using the Environment Wizard.

Many straight forward environments do not need any special modification to make them suitable for switch use. For example the environment created in **Activity 10 – Sorting** will work equally well with switches or a mouse. When there is more than one grid open at a time, you will need to make sure that the scanning cursor moves to the necessary grid at the right time. The example environment **Doing** has two grids open at once and the mouse user is required to click between each of the grids.

The environment we will make for this activity will have two grids open at one time, to give a sorting activity.

1. Setting up the main activity

Open the Environment Wizard

- Name your new environment **Sorting animals**
- Select 2 grids
- In the box Set Master Grid Styles – set the following sizes for the two grids:

No of cells across	2	7
% Screen Width	25	75
No of cells down	2	2
% Screen Height	30	30
	Style 1	Style 2

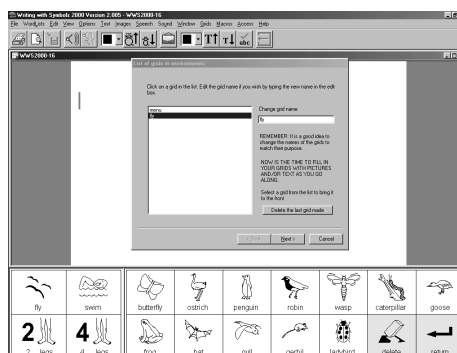
You can simply click **Next** in the **Set Document Position** window

In the window **Choose toolbars, speech and grid types**

- set the toolbar to be Simple,
- Make the grid speech voice to be Mike, by clicking on the down arrow to the right of the speech box, and selecting Mike from the dropdown list.
- Leave both grid and writing window to be Symbol Mode

2. Adding the content

- In the list box showing the **List of Grids in the Environment**, rename the first grid to be menu and the second **grid** to be **fly**.
- Fill in the menu grid with 4 animal sorting activities as shown below.



- In the grid called **fly** make the last two cells **Delete** and **Return**.
- Colour these two cells green to indicate they are action cells. (From the **Options** menu, select **Background Colour**)

Click **Next** to get the option to add another grid of style 2

Make the three remaining grids with a selection of animals that can and can't swim etc. Here are some suggestions of symbols you might use from the Rebus99 wordlist:

Swim:	penguin, whale, octopus, dolphin, duck, crocodile, frog
2 legs:	duck, toddler, owl, ostrich, parrot, gorilla, monkey
4 legs:	hamster, lizard, elephant, horse, rabbit, hippo

Give these grids appropriate names.

Add the Delete and Return cells in each of these grids as well and colour them.

You might also colour all 4 of the cells in the menu grid to show they are also action cells.

When you have finished making these grids, from the Window **Make another Grid?** Select **Finished**, and click **Next**.

3. Making the links

In the window **Set the links between grids**

- Leave the top link style set to **Link Only** Drag each of the topic grid link icons onto the relevant cells in the **menu** grid.

A switch user will not be able to click between grids on the screen and will need a way of making the cursor jump between grids as required. This is the function of the Return cell on each topic grid. (A Return cell would not be needed for a mouse user who could click on the menu grid).

- Link each of the **Return** cells in the topic grids to the **menu** grid. This will make the cursor jump back to the menu grid ready to do another of the sorting tasks. You may also want to send an Enter character (new line) at the same time, so that the next task starts on a new line. To do this click in the **Return** cell, and type **CTRL+R** to show the Cell Properties menu. Click on **Paste a Return** so that there is a tick by it.

4. Adding commands to cells

Adding commands to cells is particularly important for switch users. There are several commands which will give switch users access to functions available from the menus. There is more information on these in the Help Sheet on Macros. In this activity you will see some tips on adding macros to cells, including cells that also link to other grids.

- For each topic grid in turn, click in the **Delete** cell, go to the **Macros** menu and select **Add Commands to Cell**.
- Add the **Delete** command from the **Macros** tab as you did in earlier activities.

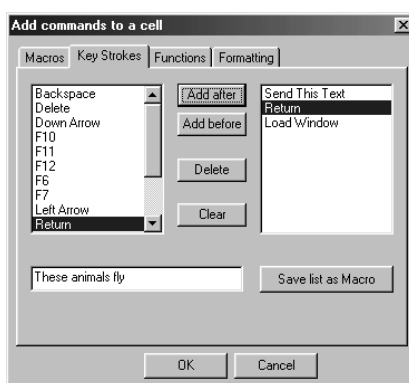
5. Changing the Cell Select properties

You may want the switch user to be able to delete more than one item without having to scan around the grid again. Go to the **Access** menu, **Switch Settings**, and select the third tab. Now click on **Continue with this cell**. Do this to all of the cells with **Delete** commands.

6. Sending different text to the document:

At the moment, when you click on each of the menu cells it simply loads the relevant grid to choose things from. We would like it to also write a title to the writing document so that it was clear what the task was:

- Click in the **Fly** cell and then go to the **Macros** menu and select **Add Commands to Cell**
- Click on the **Key Strokes** tab
- From the Key Strokes list select **Send This Text**
- A white box will immediately show under the list. Into this box type These animals fly (add a space after the last word so that it puts a symbol there in the writing document)
- Then click on **Add Before** to make this happen before the next window is loaded
- Next we want to send a **Return** Key Stroke to put a line feed ready for the line of animals to be written
- Click on **Return** in the **Key Strokes** list, Click on the Item **Send This Text** in the RIGHT box, and then click on **Add After**. This should put the commands in the following sequence



- Don't worry if you get the sequence wrong first time. Just delete the **Return** item from the list (by selecting Delete in the centre panel) and put it in again
- Then click on **OK** to add this to the cell
- Repeat this with appropriate text for the other 3 cells of the menu grid

7. Speech settings

You may want to set the environment so that each word is spoken when it is selected, including the full text sent to the document from the activity titles. In which case you should set the **Speech** settings to be **Speak after Word**, and if you wish, to **Show Highlighter**.

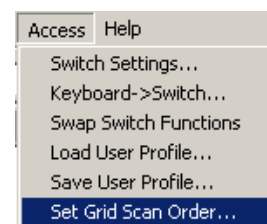
Complete the Wizard screens as in Activity 6.

8. Setting the scan order

The grid is now ready to be used by either a switch or mouse user. If you have made a grid that has irregular layout, because you have grouped cells, or if you want to have a non-standard scanning order for switches, then you will need to set the scan order.

To do this, click in the grid, and then select **Set scan order**, from the grids menu.

This will give you a small image of the grid. To set the scan order you click in the cells in the order you want them scanned. Any cells that you do not set will not be scanned. This is useful if



you have information cells included in your grid.

The scan order needs to be set for any grid that is non-standard, and then the grid needs to be saved with these settings embedded. You can do this at any time, even when you are running the program.

9. Making the best use of the space available

This activity only gives a small number of commands to the switch user – delete and Return. However, to give the greatest independence you may want to add commands such as Speech or printing.

There is always a trade off between the number of commands you can give to the switch user and the number of cells available for topic vocabulary. If you work in a high resolution (1024 x 768) you will also have room on your screen for a vertical window, which can be useful for these types of commands. (See Help Sheet 1, Modes and Resolutions Explained).