Pathfinder: Using Computer Emulation (AAC Keys version 1.2, Win XP)

It is possible to use the Pathfinder as an input device for the computer. The student can control the computer with the Pathfinder and input text using either Minspeak or Spell Mode. For computer emulation, you will need the AAC Keys software and appropriate cabling. You will need to match the Com (serial) Port and Baud rate settings on the Pathfinder and computer.

Setup:

1. Download and install a copy of AAC Keys onto your computer. AAC Keys is recommended over Serial Keys, another computer emulation software. AAC Keys can be downloaded from:
http://www.aacinstitute.org/downloads/aackeys/AACKeys.html
After it's installed, a small AAC icon will appear in the System Tray on the bottom right hand area of your computer screen when the program is running.

You can check for additional AAC Keys instructions at:
http://www.prentrom.com/servfaqs/compaccess/aackeys.html

2. Figure out what cabling you need to hook the Pathfinder to the computer. If you have a serial port (9 pin com port) on the back of the computer, then you can use just the PF-IBM serial cable that came with the Pathfinder.

If you only have USB ports on your computer you will have to buy and install a USB to Serial Converter cable so you'll have a serial port to plug into. The Keyspan cable is recommended, and we have also had success with Goldspan. In this case, you will need to plug the PF-IBM serial cable into the port with the computer icon on the Pathfinder and connect it to the USB/Serial converter cable which plugs into the USB port on the computer.

3. Make sure the Com Port and Baud Rates are the same in all locations—Pathfinder, AAC Keys (on the computer), and USB/Serial Converter cable (on the computer) if you have one. It may not actually matter what the Baud rate and com port settings are, just that they match in all three locations. The default Baud rate for the Pathfinder depends on the model, so you might want to try the default first. In this example Com Port 4 and a Baud rate of 1200 are used.

To configure the Pathfinder:

Go to Toolbox
Output
Output Method RS232
Output On
Auto line Feed Off
Output Mode Immediate
Baud Rate 1200
Character Pacing Off

To configure AAC Keys on computer:

Choose Configure
Com port 4, Baud 1200

To configure the USB to Serial cable on computer:
Start Button/Control Panel/System
Hardware Tab
Device Manager
Expand Ports (Com & LPT) by clicking on the plus sign
Click Prolific USB to Serial (or the name of your manufacturer and cable)
Go to Port Settings Tab; set Baud rate to 1200
Go to Advanced Button; set Com Port 4

To type into a computer document using the Pathfinder:

1. Launch AAC Keys. MTI and LAMterm must be off.

2. Open a blank document on the computer.

3. Start with the Pathfinder in Minspeak Mode (Toolbox light off)
To turn computer emulation on, use COMPUTER + CHAIR
The little computer indicator light on the Pathfinder display should come on.
Use in Minspeak mode or switch to spell mode.
Whatever you type, whether in Minspeak or spelling, will be sent to the computer.
To turn computer emulation off, use COMPUTER + SPACE.

To transfer a Notebook to a computer document:

1. Complete the steps above to turn computer emulation on. Test to make sure it's working.

2. Open the Notebook on the Pathfinder and a blank document on the computer.

3. Go to Toolbox, Notebook, More Items, Print. Save the document on the computer.

To control computer functions using the Pathfinder:

If your user needs more control over the computer, you may want to download a pre-made Pathfinder computer activity from:
http://www.roughmagic.net/pathfind/activity/compacc.html#compacc
This download includes instructions for loading the activity onto your Pathfinder and using it to control the computer. This activity will give the user control over menus, formatting, mouse, function keys, and web browsing.

You will need to use the Memory Transfer Interface (MTI) software to download the Rough Magic activity. To avoid messing up the vocabulary in your everyday User Area, make sure you download the activity first into User Area 6 (or another free area) before transferring it to your everyday User Area.

Troubleshooting:

If you have substituted a different serial cable, make sure it's a NULL modem cable and not just a regular serial cable.

You can experiment with different com ports and faster baud rates. The important thing is that they match on the Pathfinder, AAC Keys, and in the cable configuration.

If you get any messages about Com Port being busy you probably have MTI, or a modem or fax program running. Turn off the other program or try another com port, but remember to set all your com ports the same.

If you get a message that no com port is available, check the Device Manager to make sure your USB to Serial converter cable is installed properly. On computer go to:

Start/Control Panel/System
Hardware Tab
Device Manager

If there's an exclamation point next to the name of your cable, you will need to reinstall the drivers.

If you have downloaded the Computer Activity from Rough Magic, be aware that when you copy an Activity from one area to another, you may lose some of the links between activity levels. If that happens, just go in and re-link them.