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#### THE UNIVERSITY OF BIRMINGHAM

# USER GUIDE AND DISC FOR TOUCH TYPING TUTOR Version 2 PC (January 2000)

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# 1. INTRODUCTION

This section introduces Centre Software, and goes on to describe the user group Centre Touch Typing Tutor (TTTutor) is intended for, and the educational purposes addressed. This is followed by a discussion of the hardware required to utilise TTTutor, then a brief description of the program's functionality is given, and finally acknowledgements and installation instructions.

# 1.1 Centre Software

What is **CENTRE Software**? **CENTRE Software** is a project based at the Research Centre for the Education of the Visually Handicapped (RCEVH), University of Birmingham. Its aim is to produce very low priced software for visually handicapped youngsters, students, and adults. **CENTRE Software** is funded by a variety of sources, including the RNIB, The University of Birmingham, and the Blatchington Court Trust. This funding is reviewed at yearly intervals. The small amount of money derived from the sale of software is 'ploughed back' into the often expensive equipment urgently needed for the project. We therefore urge you not to distribute 'free' copies of this program to your friends, as this practice endangers the survival of our project.

# 1.2 Target Users

Young blind and partially sighted children. Although this software was originally developed for use with young blind and partially sighted children, there is no reason why it should not be suitable for use with sighted or older children.

# 1.3 Educational Purposes

To help teach touch typing skills to young visually impaired children.

# 1.4 Hardware Required

The hardware required to run TTTutor depends upon whether you want to use speech or not:

<u>NO</u> speech is required:

• A PC running Windows 3.1, 95, or 98.

# Speech <u>IS</u> required:

• A PC running Windows 3.1 or above and a Dolphin Apollo speech synthesiser.

Or

• A PC running Windows 95 or above with a sound card. Please **note** that the program does not support sound card speech on Windows 3.1.

# 1.5 Acknowledgements

- Blatchington Court Trust kindly supported the development of this software.
- RNIB supported the broader work carried out at the RCEVH which includes the advice we provide to people in the area of education and visual impairment.
- Paul Blenkhorn and Paul Haws of Sensory Software for their kind and helpful advice.
- Microsoft Corporation have provided the Microsoft Text-to-Speech Engine (version 4.0a). The end-user license agreement for this software product (as well as other speech voices) can be found on web page: http://www.microsoft.com/iiT/download/ttslicense.htm

# 1.6 Description

Centre TTTutor is a computer program which is designed to assist teaching touch typing skills to visually impaired children.

Centre TTTutor is specially designed to meet the needs of visually impaired people. For example, it provides the means to set up different colours, dimensions and fonts for the exercise text displayed, and has speech capability. These features make it possible for Centre TTTutor to be operated independently by the child.

This program is easy to use, with a full set of touch typing exercises supplied. Additional exercises can easily be created using any text editor which is capable of writing plain ASCII files (e.g. the Windows 'Notepad'), and organised into lessons. This means that you are able to use Centre TTTutor to teach according to the scheme of your choice - no particular approach is built into the program itself - even replacing the entire suite of lessons with your own if you wish.

# 1.7 Installation

TTTutor must be installed onto your computer's hard disk. Installation is quite simple. First, place 'Disc 1' in the disc drive. If you are using Windows 95 or above, open the 'Start' menu and select 'Run'. In the dialogue box, type 'a:\setup.exe' and press OK. If you are using Windows 3.1, from Program Manager File menu, select 'Run...'. In the dialogue box, type 'a:\setup.exe' and press OK.

Follow the instruction on the screen. You will be asked a number of questions, including which 'set up type' you would like. The following are recommended:

- **Typical** choose this if you use Windows 95 or above <u>and</u> you have a sound card. In this option some Microsoft speech software will also be installed.
- **Compact** choose this if you use Windows 3.1 only (sound card speech is not available to you).

or

choose this if you use Windows 95 or above but do not have a sound card (or do not want to use it).

Custom - choose this option if you want to choose your own options (not recommended).

# 2. USING TTTUTOR

This section describes how to use the TTTutor program, and starts with a 'quick tour' introductory section.

#### 2.1 A Quick Tour Of TTTutor

In this section you will get the opportunity to try out the program's features through various exercises and experiments. The program is not initially set up to use speech, but this is described in section 2.1.5.

#### 2.1.1 Getting Started

You should have already installed TTTutor on your hard disk.

*Things To Do:* To start the program, double click of the Touch Typing Tutor icon, or choose the option in the start menu.



You should be presented with a screen that looks like figure 1.

Figure	1.	Lesson	Menu
--------	----	--------	------

Centre Touch Typing Tutor	×
ESC	++
Lesson	HOME01

#### 2.1.2 Choosing A Lesson

TTTutor comes with a set of 35 lessons supplied with the program. Each lesson consists of number of exercises (see Appendix for a list). One lesson title is

displayed on the screen at a time. You can display other lesson titles by pressing the space bar, or the up and down arrow keys. Pressing the enter key takes you into the lesson. Pressing the escape key leaves the program.

#### *Things To Do:* Try experimenting.

Things To Do: Display the prompt 'Lesson Home01', and select this lesson by pressing enter.

By pressing the enter key you have gone into the lesson. You should now see the exercise menu for lesson Home01. The menu should read 'Echo Mode' which is the first exercise.

#### 2.1.3 The Parts Of A Lesson

There are four sorts of activity that can be included in a lesson. These mirror the set of activities which take place when learning touch typing, and are described briefly in the following for each corresponding sort of prompt on the exercise menu:

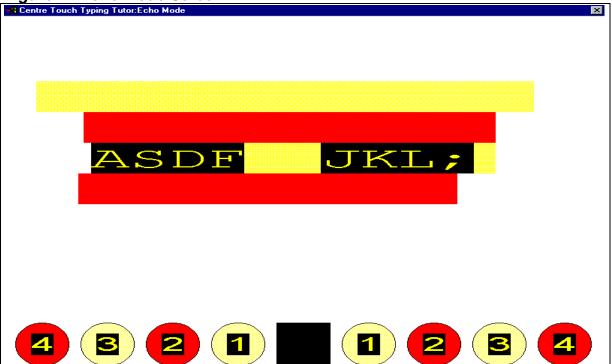
- Echo Mode an option which enables the student to explore the keyboard in his or her own way, and which can display the correct fingering for the different keys pressed, as well as speaking what is typed (if speech is turned on).
- Introduction To New Keys an option where new keys are taught by the program indicating each keystroke to be made, with the correct fingering. This instructional information may be spoken as well as displayed. The student types the keys in response to this prompting, with informative error messages provided (verbose or concise).
- **Copying Letters** here characters are presented one at a time for the user to copy. The difference between this and the previous option is that no spoken instruction for the key fingering is given. Typically this option will be used to help the learner integrate new keystrokes learned with those that they already know.
- Word Copy Exercise: <exercise file> there can be any number of word copy exercises for a lesson. Text is displayed one line at a time at the top of the screen, with the text typed by the user echoed below. Full speech for words, sentences and characters is available. These exercises allow the student to apply new keystrokes within a meaningful context.

**Things To Do:** Move through the exercise menu (this works in the same way as the lesson menu). You will find that there are options for '*Echo Mode*', '*Introduction To New Keys*' and '*Copying Letters*' only (as in this first four lessons insufficient keystrokes are learned to construct meaningful words).

# 2.1.4 Echo Mode, Finger Guide & Keyboard Map

Things To Do: Select the 'Echo Mode' option.

You will see a screen like that in figure 2.

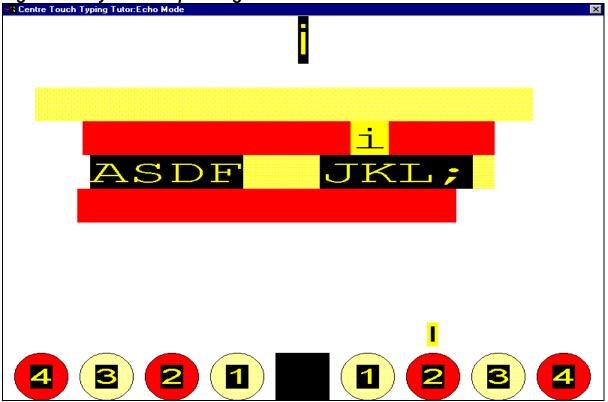


In figure 2 we can see both of the optional guides displayed. The top one is the keyboard map, which shows a simplified representation of the keyboard with the home keys (ASDF and JKL;) marked. Also the bottom guide - the finger guide - represents the fingers of each hand, with a square for the thumb. The finger guide is numbered, with each number corresponding to a finger on the hand e.g. 4 = little finger, 1 = forefinger etc.. These numbers provide a simple encoding for concise instructional messages, e.g. 'Press A using Left 4'.

*Things To Do:* In *'Echo Mode'* when a key is pressed, the appropriate fingering is shown by these guides. To see this in action, press the *'i'* key.

The screen should now look like figure 3.





In this instance, we can see the key pressed displayed at the top of the screen, and also highlighted on the keyboard map (by use of colour), and on the finger guide (by the 'I' appearing above the appropriate finger circle).

# Note that 'Echo Mode' is always available as the first option on every exercise menu.

*Things To Do:* Experiment with '*Echo Mode*'. When you have finished, press the escape key to return to the exercise menu.

# Note that the escape key will always let you quit from the current screen or menu within the program.

You will notice that after returning to the previous menu, the displayed prompt is now *'Introduction To New Keys'*, the next prompt on the menu. Every time you return to the lesson or exercise menus in Centre TTTutor, you will find it has advanced to the next prompt (provided there is one). This feature is designed to help the student to work through exercises in sequence without having to remember which one has been run.

## 2.1.5 Activating Speech

**Things To Do:** If you want to use speech through a Dolphin speech synthesiser, connect this to your computer via either the COM1 or COM2 port, turn it on. If you want to use soundcard speech, now it the time to try it out too (make sure your speakers are on). Now we must tell the computer to use speech. Starting from the exercise menu:

• Display the configuration screen by pressing F8 while holding down the control key. This should look like figure 4:

Edit Configuration : DEFAULT.CFG	×
<u>F</u> ile Help On <u>C</u> onfiguration	
Text Colour, Font And Size	User Name:
	User Name: User Name: Help Settings: Verbose Help Automatic Help Case Sensitive Progress Logging: Logging Enabled Speech Options: Speech Options: Send Speech To COM Port 1 Sound Card Initialisation String:
<u>S</u> et Font And Size	<u>C</u> ancel <u>H</u> elp <u>O</u> k

# Figure 4. Configuration Screen

- As can be seen on the bottom right of the window, 'No Speech' is selected. If you want to use an Dolphin Apollo speech synthesiser change this to send the speech to the COM port to which you have attached your speech synthesiser. If you want to use the sound card, select that option.
- Click on 'Ok'. The program will ask if it is ok to overwrite 'default.cfg' (a file where the default program settings are stored) click on 'Ok'. The menu will be re displayed, and you should hear the prompt spoken.

*Things To Do:* Try moving through the menu (using the arrow keys). You can replay prompts by pressing F1, and spell them by pressing F2.

*Things To Do:* Re-run '*Echo Mode*'. You will be able to hear the keys that you type spoken.

# Notes: Press F1 after pressing a key and the computer will tell you in detail which finger you should have used. At any time you want the speech to shut up press the F7 key.

#### 2.1.6 Learning New Keystrokes

*Things To Do:* Having left the 'Echo Mode' screen, now run the 'Introduction To New Keys' option.

The screen displayed will look almost identical to that used for '*Echo Mode*', with the exception that it displays a letter at the top of the screen along with its fingering on the guides. This is a new keystroke to be learned. The students task is to press the requested key using the appropriate finger.

*Things To Do:* If the wrong key is pressed, the program will sound an error beep (and give help information when speech is turned on). Try this out.

*Things To Do:* Try completing the exercise.

When you have done this, the exercise menu will be re-displayed (displaying 'Copying Letters'). Centre TTTutor exercise option screens (with the exception of *'Echo Mode'*) automatically return control to the menu when the current exercise has been completed.

If you have activated speech as in 2.1.5, you will have 'Verbose Help' selected. This causes Centre TTTutor to give lengthy instruction as to which fingers should be used for which keys, and very comprehensive error reports - which tell the student where the correct key is relative to the one actually pressed.

If 'Verbose Help' is not selected in the configuration, an abbreviated form of help and error reporting is given, which is more suitable for frequent or older users. This concise speech makes use of the simple finger numbering scheme used by the finger guide (see 2.1.4).

**Things To Do:** Try loading the configuration screen (pressing the Ctrl and F8 keys), deselect 'Verbose Help', save the new configuration as before, and select 'Introduction To New Keys' again. Listen to the difference, both when the correct keys are typed, and when errors are made.

#### 2.1.7 Practising New Keystrokes

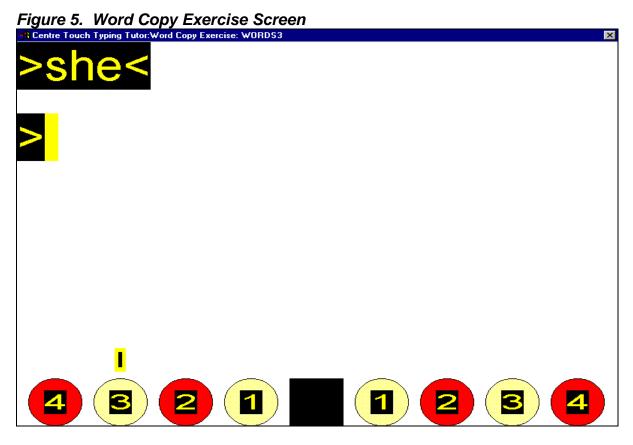
Once the student has learned some new keystrokes, he or she needs to practise them perhaps both in isolation and in conjunction with keystrokes previously introduced. This simple practise is provided by the 'Copying Letters' option. As mentioned earlier in section 2.1.3, this screen is the same as the previous one, except that it doesn't provide spoken instruction for each key that is requested.

Things To Do: Select this option and try it out.

#### 2.1.8 Using Words & Sentence Exercises

Having learned and practised keystrokes, it is best to use this knowledge in a useful way. Centre TTTutor makes this possible by providing the option '*Copying Words:* <*exercise file>*' with a set of suitable exercise files, named '*words1'*, '*words2' etc.*. Each exercise file has its own prompt e.g. '*Copying Words: words1'*.

*Things To Do:* Return to the lesson menu, select '*Lesson Part10*', and select '*Copying Words: words3*'. The screen should now resemble figure 5.



We have the first sentence of the exercise 'words3' displayed across the top of the screen (and initially spoken if speech is turned on), and a prompt below for this text to be typed by the student. In the figure we also have the finger guide displayed at the bottom of the screen - which can be turned on / off in the configuration screen as usual.

There are several function keys for controlling speech for these exercises. These are:

- F1 speak current sentence.
- F2 spell current sentence.
- F3 speak current word.

- F4 spell current word.
- F5 spell what has been typed of the current word so far.
- F6 toggle echo typing on / off.
- F7 mute speech (this will stop the speech).

Some simple symbols are used to give information about the exercise, these are:

- '>' indicates the beginning of a sentence.
- '+' indicates that the sentence continues off the edge of the screen, and will scroll when the last character of the displayed portion is typed.
- '<' indicates the end of a sentence.

These are displayed in highlight colours to distinguish them from the characters that you have to type. The exception to this rule is the '<' which indicates carriage return. When you reach this symbol, press the enter key to get to the next sentence.

Things To Do: Try doing the exercise, and use the different function keys.

#### 2.1.9 Tuneful Typing!

When Centre TTTutor was first conceived, the issue of how to motivate children to practise was raised. Teachers felt that some kind of 'fun' element to the program would be highly desirable, though a problem here is that conventional games etc. are visually oriented. To try to work around this problem, we have implemented a simple feature where tunes can be played in response to key presses while the student does word copy exercises.

*Things To Do:* With the exercise menu displayed, press the F7 key while holding down the control key. Now run any word copy exercise, and listen to the difference. You should hear musical notes played for each correct key press, with the complete tune played on completion of the exercise. To turn this option off again, simply repeat the Ctrl.-F7 key combination with the menu displayed.

This concludes the quick tour. To help you gain familiarity with some of the other features of the program, some extra 'things to do' prompts are included in the remainder of the manual. We strongly advise you to work through these.

#### 2.2 Configuring The Program

This section of the manual describes how the program may be configured to suit the needs of different children. There are many features of Centre TTTutor which make it especially suitable for usage with visually impaired children. For example, the font, size and colour of the exercise text may all be set, and speech turned on/off and sent to specific ports.

To access the configuration screen (shown in figure 5 on page 11), press Ctrl-F8 from the lesson menu displayed when the program is started up.

# 2.2.1 Setting Text Font And Size

We can make use of any **True Type** font available on the computer, and permits font sizes up to 100 point to be chosen. To choose the font, click on the 'Set Font And Size' button. The standard Windows font selection dialogue will be displayed (see figure 6). Simply select the font and size etc. you require from this.

Font			? ×
Eont:	Font style:	<u>S</u> ize:	
Arial	Regular	48	OK
약 Arial 각 Arial Black 각 Arial Narrow 각 Arial Rounded MT Bold 각 AvantGarde Bk BT 각 AvantGarde Md BT 각 BankGothic Md BT	Regular Italic Bold Bold Italic	22  24 26 28 36 48 72	Cancel
	Aat	31	
	Sc <u>r</u> ipt: Western	•	
	westein		

Figure 6. Font Selection Dialogue

# 2.2.2 Setting Text Colours

Centre TTTutor uses two sets of colours for text:

Ordinary - for exercise text Highlight - for menus and text entry

These text colours can be set for the foreground and background of both ordinary and highlight text by using of the red, green and blue colour sliders to mix the required colour.

*Things To Do:* Try changing the text font and colours, then observe the effect when using the menus and running exercises.

# 2.2.3 Speech Options

There are three speech options, these include:

- No Speech
- Send Speech To COM1
- Send Speech To COM2
   Speech is sent to the appropriate port of the computer, for use with Dolphin Apollo (or compatible) speech synthesisers.
- Sound Card

There is also a space for an 'initialisation string' to be sent to the speech synthesiser. An initialisation string allows you to set up the Apollo speech synthesiser in a particular way, ie. kind of voice to use. The Dolphin Apollo 2 permits (amongst other things) the speed and pitch of the voice to be altered. See the Dolphin manual for details on speech configuration. If you don't understand this paragraph don't worry, you can leave this space blank, and the normal synthesiser voice will be used.

The Sound Card option means that speech will be sent to the sound card through a program called SAPI Speak.

#### 2.2.4 Help Settings

If you are using speech, it is possible to alter the amount of spoken help the program gives to the user. This can be done via two options on the configuration window; Verbose Help, and Automatic Help (which are set to on as default).

'Verbose Help' if turned on, causes the program to give very comprehensive descriptions of the location of keys in the 'Introduction To New Keys'. This is especially suited to the needs of the severely visually impaired user and the totally blind. If this option is turned off, the help given is in a shorter coded form - e.g. "press 'j' with right 1" would indicate that the user should use the fore finger of the right hand to press the 'j' key (this numbering scheme is also used by the optional finger guide mentioned later in this section).

**'Automatic Help'** if turned on will cause the program to provide help when an error is made. The sort of help given is an indication of the correct key to press - if verbose help is on, this includes the location of the key relative to the one pressed.

#### 2.2.5 Mode

This simply determines whether the program should tell the difference between capital and lower case letters. For example, if this option is turned on and the program asks the user to type 'a', and the user types 'A', then the program will tell the user they have typed it wrong.

Things To Do: Try turning this option on, and running exercises.

# 2.2.6 Guides

**Keyboard Map:** indicates where the required key is located on the keyboard. If turned on, this will be displayed in all exercises (except the word copying exercises).

**Finger Guide:** indicates which finger should be used to press a given key, and if turned on, will be displayed at the bottom of each of the exercise etc. screens.

*Things To Do:* Experiment with different combinations of the guides. This will help to give you an idea of their suitability for your students.

The colours for these guides can be changed. To do so, click on the '*Finger Guide Colours*' button to reveal a screen like figure 7.

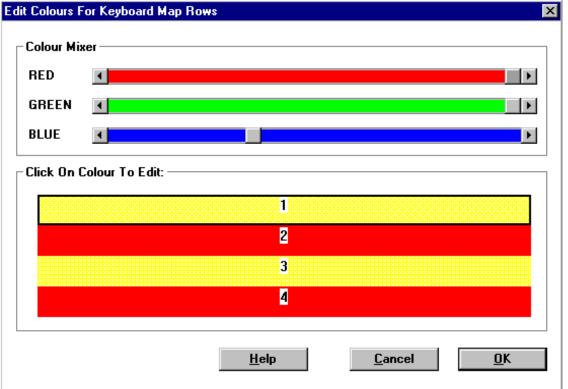


Figure 7. Finger Guide Colour Editing Screen

This screen enables you to change the colours used for the different finger guide finger circles. To do this, simply click on the colour to change, and change the colour by moving the colour sliders. There is also a corresponding screen for editing the colours used for the keyboard map rows.

#### 2.2.7 Progress Logging

If logging is enabled, TTTutor will write information to a log file whose name should be entered in the 'Log File:' box. A 'log file' is a file which contains a recording of all the students activities while using the program. This information will include, for each letter or copying word exercise, the name of the user (from the configuration file), the expected exercise text, what was actually typed including errors, the time taken, and an indication given if the user quit before completing the exercise. Note that the log file will be overwritten each time the program is run.

*Things To Do:* Enter a log file in the box and run some word copy exercises. Examine the resulting log file using a text editor or word processor of your choice.

#### 2.2.8 User Details

As we can anticipate that the program will be used with students having different degrees of visual impairment, Centre TTTutor has been written to enable the teacher to potentially have a configuration file for each child. In the User Details section the child's name may be filled in for reference. This name is output to log file entries when log files are used.

#### 2.2.9 Using Configuration Files

We have discussed the different configurations which are possible (e.g. different colours and sizes of font etc.). It is important to be able to save these different configurations so you don't have to keep setting them up. We are able to open these files for editing, and save them under the same, or different names.

To perform these operations, simply select the appropriate menu option from the menu.

Centre TTTutor will list all the configuration files in its working directory for selection and will by default save new configuration files to that directory. The working directory for the program is set to the Centre TTTutor installation directory initially but may be changed to any other by changing the '*Properties*' settings for the program icon (consult your Windows manuals or on-line help to find out how to do this in the standard fashion).

Configuration file names should end in '.cfg'.

**Things To Do:** Try creating and saving a number of different configurations, for example, these might be tailored to the needs of your students, and then load these via the file menu 'Open...' option within the configuration screen.

#### 2.3 Running Centre TTTutor

Centre TTTutor can be given the name of a saved configuration file as a command line parameter. What this means is that you can get the computer not only to start the Touch Typing Tutor, but to *start* it with a particular configuration. By doing this, you can tell the program to establish a particular set of text and speech options when

it starts up. This is very useful when running it from a menu system, where it might be desirable to have several menu options which load the program with various configurations to suit different students e.g. 'John's Touch Typing', 'Sue's Touch Typing'. This can be used to give autonomous access to the program.

To do this, create and save a configuration file. The file can then be used as a parameter on the command line, e.g. *tttutor test.cfg* or *tttutor john.cfg*, etc.

# 3. CREATING YOUR OWN LESSONS

In this final section we look at how additional lessons and exercises can be added to Centre TTTutor, or used to replace the supplied exercises. The techniques involved will be introduced throughout this section, with more exercises suggested which will help you to get to grips with the ideas quickly.

#### 3.1 Using Lesson Directories

Centre TTTutor looks for directories in its current working directory (e.g. 'c:\windows\winttt' with a default installation). It assumes that all the directories located contain lessons, and presents these in alphabetical order on the lesson menu, prefaced by 'Lesson:'. As the name of the directory is not important, if we wish to add a new lesson, all we need to do is create a new directory. To remove a lesson, we simply delete the directory.

*Things To Do:* Create a new lesson directory called '*Test*'. Run the program and find this on the lesson menu.

#### 3.2 Lesson Files

Lesson directories can contain many files. Some files - if they are present - have a special meaning to Centre TTTutor. These files are:

- **'newkeys'** if a file having this name is present, Centre TTTutor will assume that it contains new key strokes which will be taught to the student via the *'Introduction To New Keys'* option. This option will only be displayed if this file is found.
- **'letcopy'** if a file having this name is present, Centre TTTutor will assume that it contains the text to be typed for a letter copy practise exercise, and will be presented to the user via the 'Copying Letters' option. This option will only be displayed if this file is found.
- **'tune'** this file tells Centre TTTutor the notes of the tune to play when the 'Tuneful Typing!' feature is turned on.
- **'intro'** this file is only important if you are using speech. When the '*Introduction To New Keys*' exercise is run a spoken message tells the user which keys they are going to learn. The message is contained within this file.

Any other files found in a lesson directory are assumed to contain word copy practise exercise text. Any directories are simply ignored.

# All lesson files used with Centre TTTutor should be simple ASCII (plain text) files.

# 3.3 Adding A 'newkeys' File

To do this, simply choose the keys to be introduced, and type them into your text editor or word processor, and save the file in the lesson directory as 'newkeys'. To help to reinforce the learning process, it may be helpful to repeat keystrokes more than once. You may find it useful to view the different 'newkeys' files provided with the exercises supplied.

**Things To Do:** Create a 'newkeys' file in the lesson directory ('Test') that you have created. Enter keystrokes of your choice, and then try running Centre TTTutor and selecting the appropriate option from the exercise menu for lesson 'Test'.

#### 3.4 Adding A 'letcopy' File

To do this, compose the exercise content, and type this into your text editor or word processor, and save the file in the lesson directory as *'letcopy'*. When designing a *'letcopy'* file contents, it may be helpful to integrate new keystrokes with those already known. Again, you may find it useful to view the different files provided with the exercises supplied.

**Things To Do:** Create a '*letcopy*' file in the lesson directory ('*Test*') that you have created. Enter keystrokes of your choice, and then try running Centre TTTutor and selecting the appropriate option from the exercise menu for lesson '*Test*'.

#### 3.5 Adding A Word Copy Exercise File

To do this, compose the exercise content, and type this into your text editor or word processor, and save the file in the lesson directory under the name of your choice (not 'newkeys', 'letcopy' or 'tune'). This file will be offered as a word copy exercise on the exercise menu for the lesson.

**Things To Do:** Create a simple story file in the lesson directory ('*Test*') that you have created. Try running Centre TTTutor and selecting the appropriate option from the exercise menu for lesson '*Test*'.

#### 3.6 Adding A Tune File

Centre TTTutor lets you create your own tune files which it plays back via the built in PC speaker. These files use a simple format to tell the program which notes out of it's two octave range to play, and how long each note should last for (gaps or 'rests' are not available).

An example of a tune file's contents is:

c1 d2 e3 f4 g4 a4 b4 C1 D2 E3 F4 G4 A4 B4 c#1 d#2 e#3 f#4 g#4 a#4 b#4 C#1 D#2 E#3 F#4 G#4 A#4 B#4 c%1 d%2 e%3 f%4 g%4 a%4 b%4 C%1 D%2 E%3 F%4 G%4 A%4 B%4

This file contains all the available notes and all available durations. These are encoded as follows:

- Letters 'c' 'b': These indicate musical notes in the lower octave.
- Letters 'C' 'B': These indicate musical notes in the higher octave.
- '#' & '%' : when placed immediately after the note letter, indicate the note should be played as a sharp or flat respectively.
- Numbers '1' '4' : Immediately follow the note (+ optional '#' or '%') and indicate the duration of the note. '1' is the longest, and '4' the shortest.

Notes can be space separated, though this is not essential.

There is no limit to the length of the tune file. When it is used with a word copy exercise, the notes will be played one at a time for each correct keystroke, and then, if there are more letters to type than notes, will be played from the start again. The tune file is played once straight through from the start upon completion of the exercise.

These files can be created using the text editor of your choice, and should be saved into the appropriate lesson directory.

# 3.7 Adding An Intro File

It may be necessary to change the messages which are spoken to the user when they start an '*Introduction to new keys*' exercise (e.g. if you add new exercises of your own). On starting a 'newkeys' exercise the program will try and speak the contents of the 'intro' file in that lesson. Have a look at the contents of an intro file using Notepad. By changing its contents the spoken message will change. It's best to keep the spoken message short.

# 4. GLOSSARY

**Lessons and Exercises.** The program organises a set of exercises into a lesson (e.g Home01, Home02 etc.). A given lesson will include a tutorial exercise, 'Introduction to New Keys', and a copy exercise, 'Copying Letters' as well 'Echo Mode'. It will also usually include one or more 'Copying Words' exercises.

# 5. APPENDIX - LESSONS

Eighteen lessons are provided with the program, plus a selection of sentences which contain all the letters of the alphabet.

#### Home01 INTRODUCE HOME KEYS

asdfjkl; a s d f j k l asdfjkl; ;lkjfdsa; l k j f d s a

#### Home02 INTRODUCE f and j

fff jjj fjf jfj fjf jfj fff jjj fff fjfj

#### Home03 INTRODUCE d and k

#### Home04 INTRODUCE s and I

sss III sis isi sis isi sss III sis sisi

#### Home05 INTRODUCE a and ;

aaa ;;; a;a ;a; a;a ;a; aaa ;;; ;a; a;a;

sad; lass; fads; ask; asks; flask; flasks; salad; salads; dad falls; all sad lads; ask a dad; a sad lass; a salad;

#### Part06 INTRODUCE E and H:

ddd eee ddd eee ded ede; hhh jjj hhh jjj hjh jhj; sea led heed lead had leek dash head hash sash

a lass has had a salad; dad sees a lake; e shall feed a lad; he has a head;

# Part07 INTRODUCE G and U:

fff ggg fff ggg fgf gfg; jjj uuu jjj uuu juj uju; fag gag dull; used; full; uses; judge; judges; useful;

she used jugs; she had a glass; he shall guess; she had a full jug;

#### Part08 - INTRODUCE R and I:

fff rrr fff rrr frf rfr; iii kkk iii kkk iii kkk kik iki ark air rail dark fair hill drill skill hark lair;

he said he had dark hair; he likes figs; she is here; here she is; he is sure she is here; he fills a jug;

# Part09 INTRODUCE T and O:

fff ttt fff ttt ftf tft; III ooo III ooo Iol olo; the this the this lot tot old sold told the gold fold doll load this dole for;

she took a jar to her; at this late date; get her a dress he had sold it to her; this is for her;

# Part10 INTRODUCE W and N:

sss www sss www sws wsw; jjj nnn jjj nnn jnj njn; ending sending lend fending trend; low how tow saw law daw; ion sion tion station sion

we saw her there; we had left her; we knew she was there; she has red jeans; he went to see her; look at the new gate;

# Part11 INTRODUCE B and M:

jjj mmm jjj mmm jmj mjm; jjj bbb jjj bbb jbj bjb arm dame lame home some foam dame name game; job lob bob bib rob boat brain bible robin bobbin;

he made the bed; it is a shame; she was blamed; he had a job; the dog had a bone;

#### Part12 INTRODUCE C and Y

ddd ccc ddd ccc dcd cdc; jjj yyy jjj yyy jyj yjy; can cut rice nice trice; cry shy sty sly sky grey;

it was a sty; she saw the girl cry; do not go yet; say hello to her if you can;

# Part13 INTRODUCE P and V:

fff vvv fff vvv fvf vfv; ;;; ppp ;;; ppp ;p; p;p; ape cup sup hop cop top pen mops pant piece plane eve give five vale vein very vary vote veil vamp;

she went past him; we will come very soon to see her; it was a vast area; she was very sorry to go;

# Part14 INTRODUCE X and Q:

sss xxx sss xxx sxs xsx; aaa qqq aaa qqq aqa qaq; vex sex cox rex except explain; quad quit quins quilt;

she saw the boxes; she quite liked her job; he was quiet; she mixed the drinks; the mixer was there;

#### Part15 INTRODUCE Z and COMMA

aaa zzz aaa zzz zaz aza; kkk ,,, kkk ,,, k,k ,k, lazy glaze crazy puzzle, buzz, zone, zero, zeal, zone;

she was very lazy; she went into the wrong zone; the zebra was there; she did the puzzle

#### Part16 INTRODUCE SHIFT KEY (FOR CAPITAL)

Aa; Aa; sS; sS; dD;Dd; Jj; jJ; kK; kK; IL; LI;

John and Mary; Mark and Sara; Fred Brown; Fred Brown is the King

England Ireland Scotland Wales London Driffield, East Yorkshire

#### Part17 INTRODUCE FULL STOP

III ... III ... I.I .l. no. yes. No. Yes. hello. Hello. Goodbye.

We will come to see you soon. Ask Mary to go home on Monday. I saw those trees last week. Go to school and tell Anne to come home.

#### Part18 INTRODUCE NUMBERS:

aq1 sw2 de3 fr4 fr5 ft6 ju7 ki8 lo9 ;p0

There were 3 socks and 4 shoes in the bag. There were 6 sandwiches and 6 drinks in each basket. We gave him 9 sweets to give to the 3 little girls. If you add 4 and 4 together, you will get a total of 8. There were 11 pairs of shoes in the big cupboard at home. The 2 children and 3 adults went to church each Sunday. The 7 children had 7 dishes, 7 spoons and 7 plates each. There were 8 men, 8 women, 8 girls and 8 boys on the bus. The 2 boys each had 2 friends to tea on Saturday night. The boy had 2 cats, 3 rabbits 1 dog and 4 guinea pigs.

#### SENTENCES - REVIEW ALPHABET KEYS:

It was amazing how many children ordered extra copies of Thomas the Tank Engine books from the shop so quickly.

It was emphasized that the very young juniors need extra food which cannot be quickly obtained.

A small quiet boy who lives next door to John went out of the gate and down the zigzag drive.

In spite of the hazards, a decision was made to grant their request and give George the extra job.

The boy did just give a quick answer but could not find words to explain the amazing story.

Jane wore the most beautiful and exquisite necklace of topaz that Mary had ever seen.

#### TOUCH TYPING TUTOR UPDATE

We have added 16 new lessons to our **CENTRE TOUCH TYPING TUTOR** program.

The latest version includes 34 lessons in all. As well as lessons covering letters and numbers (lessons 1 to 18), additional lessons cover punctuation and shifted characters (lessons 19 to 34). These are summarised below.

:	Colon	Lesson 19
@	At sign	Lesson 20
6	Apostrophe / single quote	Lesson 20
-	Hyphen / dash / minus	Lesson 21
=	Equals	Lesson 22
/	Forward slash	Lesson 23
١	Back slash	Lesson 24
?	Question mark	Lesson 25
>	Greater than sign	Lesson 26
<	Lesser than sign	Lesson 26
""	Double quotes	Lesson 27
!	Exclamation mark	Lesson 27
£	Pound sign	Lesson 28
\$	Dollar sign	Lesson 28
%	Percentage sign	Lesson 29
&	Ampersand	Lesson 30
*	Asterisk	Lesson 30
()	Left / right brackets	Lesson 31
+	Plus sign	Lesson 32
_	Underscore	Lesson 32
#	Hash sign	Lesson 33
[]	Left / right square brackets	Lesson 34