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ECDL Is Achievable When Using Assistive Technology

Although the majority of ECDL objectives can be achieved whilst using assistive technology, there are a few tasks that cannot. This is because the task is not yet possible, or it is too time consuming, or it would require too high a level of IT knowledge. Encouraging our learners to concentrate on what can be achieved promotes learning, while pointing out what cannot be achieved causes disillusionment.

Module 1

As this is a theory module all objectives can be achieved, although it can be seen as fairly heavy going by learners with dyslexia or other literacy issues. We found that materials produced using DAISY helped them.

Module 2

We have found most objectives are achievable. Many of the objectives that we have struggled with in this module are achievable but the Technicians do not make these options available to our students in order to protect the network. As a result we split the tasks between practical work and theory. Installing and uninstalling a software application comes into this category, but even if it was available the different applications that could be installed can be so different. Some are very accessible and others are definitely not. It depends on the software manufacturers.

One question I am frequently asked is how to read the system information. This is a fairly simple one. With Jaws we use the **Jaws cursor** rather than the PC cursor and with Supernova we use **virtual focus**. It sounds a lot but it is very quick and easy.

Another objective which is not quite so easy but achievable is using available **help** functions. This is fiddly and requires students to learn the sequences involved. With practice this can be achieved. When a learner is reading a question electronically they need to be in the Help and Support window, not whichever application they were using to read the paper. The biggest problem from our point of view is changing the instructions each time there is an upgrade.

Recognising and selecting common desktop icons is fully achievable if we cover icon descriptions as theory and selecting icons as a practical exercise. Moving desktop icons is possible but too advanced and time consuming, so we advise our students to leave this question.

Arranging files by size without a mouse is something that throws many people. This can be achieved easily through the menu options. The hardest thing is

getting used to the sequence of events so that it's known if the files are in ascending or descending order.

Module 3

Use available Help functions comes up in every module and is achievable. It does take practice because it relies on the students remembering the sequence without any visual clues.

Applying subscript and superscript to text. This is easy so long as candidates are informed that some assistive technologies require a script change. This setting allows a student to be notified when proofreading and is available in the Control Panel and is fully accessible.

Tables tend to worry visually impaired learners although there is not anything that cannot be achieved. The amount of information given varies between the different assistive technologies and as a result some are easier than others to use with tables.

Move, resize and delete a picture is not a problem; we just use **control tab** to move between the tabbed pages in the Format Picture window.

Setting tabs is an area that our students often fall down on. It is not because the learner cannot do it, it's because they forget to press their tab key after setting the tab to move the text. This would be obvious to a sighted student but tends to be overlooked by someone using a screen reader.

Mail merge is fully achievable but it does take practice. We teach our students that, once they have mastered this, they can create things like Christmas card lists. Offering some sort of autonomy in return for learning to use mail merge makes all the difference.

Adding words to a built-in custom dictionary is not difficult but is not an option that the Technicians make available on our network. We can only treat this as a theory topic.

Previewing a document is not a problem, however finding a purpose for someone who cannot see the screen is more of a challenge!

Copying Formatting, or using the Format painter is something we used to struggle with but is actually very easy. The learners need to press **Control shift** and **c** to copy the formatting, move to the text to be formatted then press **Control shift** and **v**.

Module 4

The biggest problem for our students when working on spreadsheets is keeping track of where they are. Depending on the assistive technology, if the headings

are not emboldened or the student does not know about verbosity settings, then they could really struggle.

Widen the columns where needed. This often confuses people and readers think they should 'help out'. This is completely unnecessary because a visually impaired person working on spreadsheets professionally would be expected to do this all the time. We teach our students that each time they finish working on a sheet, so long as wrapped text is not being used, select the whole sheet and choose **Column** from the **Format** menu and use **AutoFit** Selection.

Freezing headings although fully achievable does not make a lot of sense to someone using a screen reader. All we can do is teach our learners why it is useful to their sighted peers.

Charts again are achievable but what would be an obvious mistake to a sighted learner can be overlooked. We cannot do a great deal about this other than teach the reasons behind the sequence of events that need to be followed, for example not selecting blank cells.

Moving around the buttons in headers and footers is time consuming and the descriptors read out by the assistive technology are not always useful. We try not to use shortcut keystrokes but in this instance they are more accessible, although we do insist our students work through the long way first.

Module 5

This is one of the harder modules because there are areas that are not yet accessible to non-mouse users, unless the learner is way above level 2. Questions asking for alterations to be made to an existing form or an existing report are non starters for the majority of our learners. We advise our learners to move on to the next question.

The area that tends to slow a learner down is caused by the assistive technologies not offering enough information about where a learner is in a table. Stopping and checking is a distraction and increases the amount of time needed to complete a task.

Queries are fully achievable although not all of the row labels are read out. As a result the learner is reliant on training and practising the sequences involved.

Module 6

This is the other more difficult module. The majority of tasks are achievable but they tend to be very time consuming. Creating and amending Organisation Charts is fine, just time consuming. Adding text boxes is possible but fiddly as is inserting autoshapes. Many of our learners prefer to leave inserting text boxes and autoshapes until last, attempting them only if they have time.

Colours are a problem in PowerPoint because it uses the colour wheel which is not read by the assistive technology. As a general rule, if the learner moves the cursor 5 times once they are in the colour wheel, they will move to a different colour. BCS do not penalise a candidate for selecting an incorrect colour if they have been informed there is likely to be a problem, e.g. a candidate is colour blind or visually impaired.

Charts are not as easy as they could be because PowerPoint uses its own datasheet which does not read well. This is achievable with practice. Changing the colours of segments is achievable but, because of the amount of time it takes, it is not always worth attempting.

Adding drawn/free hand objects is not possible.

Module 7 – Information (Internet)

Working on the internet is never going to be easy because the learner is always reliant on the webpage producers creating pages that work in a logical manner, without frames and providing images tagged with alternative text. BCS have done a lot of work in this area and the ECDL pages do not tend to be a problem.

Many people seem to struggle with typing in an edit area. This is not a problem. The internet uses 2 modes, a one-way system of communication and a two-way system of communication. The one-way system of communication is the usual mode because all that is happening is the web page being read out. When in the two-way system of communication, the learner just needs to tell the assistive technology. Jaws calls this **forms mode** and Supernova calls this **auto interactive mode**. With a mouse this change is automatic and therefore many people do not see this as a problem.

Selecting an image on a web page and saving it is something many people struggle with, although it is not difficult. The learner needs to move to the image, then Supernova users press the **Delete** key and Jaws users press the **asterisk** on the **number** pad. This will bring up a context menu from where the image can be saved.

Module 7 – Communication (email)

This is quite a big area in syllabus 4.5 but there are not any tasks that are inaccessible. Obviously there is a lot for a learner to take in and it can be difficult to convince someone without sight why they need to cover some objectives such as previewing a message.