Teaching SSI students to use cursor and heading navigation skills effectively when using a screen reader in Microsoft Word



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Screen reader hotkeys vs. Windows hotkeys

- Screen reader software reads aloud information displayed on the computer screen.
- It allows people who can't use the mouse to use a combination of keyboard shortcuts (hotkeys) to fully access a computer.
- The VI individual must use a range of Windows hotkeys (shortcuts that work when screen reader is off) and screen reader specific hotkeys (that only work when screen reader is on).

<u>Windows hotkeys (work all</u> <u>the time)</u>

- **Windows Key** = open Start Menu to launch an app or file
- **Ctrl + Home** = jump cursor to top of document
- Ctrl + Alt + Tab = display all

open apps on your screen

Windows Key + D = jump to desktop and minimise all windows

Screen reader specific hotkeys (only work when screen reader is on) Caps Lock + Down = Read from cursor **Ctrl** = stop talking **Caps Lock + I** = read current line Caps Lock + F6 = open Heading List **Caps Lock + F12 =** current date & time

Using a keyboard or braille display hotkeys?





I have split this session into three sections

1. Cursor navigation for reading and writing

2. Headings - how to add them and navigate using them

3. Resources to teach headings and cursor navigation skills

Why is it being able to control your cursor in Word important?

- By being able to move your Windows cursor accurately using with just hotkeys, you are able to choose where to read and where to type with precision.
- You will build fluency in skipping to key information. This is vital for a screen reader user who will have to put up with a lot of audio overload.

Cursor navigation for reading and writing

- In this section, I will discuss:
- Moving your cursor around a word document using hotkeys
- Selecting text to edit or delete using hotkeys
- Manipulating selected text (delete, copy, cut, paste) and formatting using hotkeys

Note: all of these are Windows Hotkeys and work without screen reader on. I recommend having it on to hear what your student will hear.

| Word – moving your cursor around the document | |
|---|-------------|
| I can move the cursor to top of | Ctrl + Home |
| document using keyboard hotkeys | |
| I can move the cursor to end of | Ctrl + End |
| document using keyboard hotkeys | |
| I can move the cursor to end of | Home |
| current line using keyboard hotkeys | |
| I can move the cursor to start of | End |
| current line using keyboard hotkeys | |

| Word – moving your cursor ar | ound the document |
|---|---|
| I can move the cursor up or down a line using keyboard hotkeys | Down/up arrow |
| I can move the cursor one character left or right using keyboard hotkeys | Right/left arrow |
| I can move the cursor one word left or right using keyboard hotkeys | Ctrl + right arrow Ctrl + left arrow |

| ext to edit or delete |
|--|
| Place the cursor at the start of |
| the word |
| Press Ctrl + Shift + right arrow |
| key |
| Place the cursor at the end of |
| the word |
| Pressing Ctrl + Shift and left |
| arrow key |
| Ctrl + A |
| |

| Word - selecting text to edi | it or delete |
|--|------------------------------|
| I can select all text from current cursor position to end of the line | Shift + End |
| I can select the whole paragraph from current cursor position | Ctrl + Shift + Down Arrow |
| I can read current selection | Caps Lock + Shift + |
| Note: This is a screen reader hotkey. It is a | Down Arrow |
| really good way to check what is selected before you manipulate the text | |

Note: introduce the concept of the clipboard when teaching these skills. I use the analogy of a basket or backpack.

| Word – manipulating selected text | |
|-----------------------------------|---|
| I can dele | Press the backspace or delete key |
| te selected text using | |
| keyboard hotkeys | |
| I can copy selected text | Once text is selected, press Ctrl + C |
| to the clipboard using | This will save it to the Clipboard |
| keyboard hotkeys | |
| I can cut selected text to | Once text is selected, press Ctrl + X |
| the clipboard using | This will save it to the Clipboard |
| keyboard hotkeys | |

Word - manipulating selected text

I can paste text from clipboard using keyboard hotkeys

Place your cursor where you want your text to be pasted and press Ctrl + V **Note:** if you copied then the text will remain in the original location, and you will have a copy here. There are now two copies of the same text. The text will remain in your Clipboard until you copy or cut another item. If you used cut, then the text will permanently move.

Activity One - Selecting text and using cut, copy & paste (8 minutes)

- Find the **Activity One word document**, in which I have created three mini-tasks to practise some of these hotkeys:
- Task One hedgehog (selecting, copy & pasting the basics)
- Task Two Scrambled sentences (copy & paste)
- Task Three Scrambled sentences (cut & paste)

What are Headings?

- Headings are a fixed point in a word document that allow a screen reader user to jump to the most relevant section without listening to all the unneeded information.
- Headings need to be added to a new word document. You can do this with your mouse or with hotkeys.
- You can create styles for many different items in your document, but the most important are **heading levels** and the **main body of your text**, which is called the **Normal** style.
- Headings are built into (most) websites and published documents.

Headings

There are two aspects of headings that you should be aware of when working with an SSI computer user:

Adding Headings into a Word document for a screen reader user

Using a screen reader to navigate by Headings

Adding Headings into a Word document for a screen reader user

Put

Headings into a word

document

Select the phrase (or just have your cursor on the line it is on) and then press:

CTRL + ALT + 1 = Heading Level 1 (main heading) CTRL + ALT + 2 = Heading Level 2 (sub-heading) CTRL + ALT + 3 = Heading Level 3 (sub-subheading) Note: This is a Windows Hotkey but always check with screen reader

Adding Headings into a Word document for a screen reader user

| Change a | Highlight the Heading (or have your cursor on |
|--------------|---|
| heading | the line it is on) and then press: |
| back to | |
| Normal Style | CTRL + Shift + N = Normal Style |
| | |

Using a screen reader to navigate by Headings

| Search | Caps Lock + F6 then ARROW UP/DOWN and |
|------------|---|
| Headings | Enter. |
| Windows – | |
| shows list | This will iump the cursor down to the chosen |
| of | heading Then press Caps Lock + Down Arrow to |
| headings | read from there |
| (slow | |
| way) | |
| | |
| | |

Scan Mode/Quick Keys

- Quick Keys Navigation (JAWS) or Scan Mode (Narrator) is a mode that lets you jump to different elements in a document with a single key.
- It is automatically switched on when web browsing but in Word, it needs toggling on. It will remain on until it is toggled off and you can't type using your cursor until it is.
- It is solely for navigating quickly around a document or webpage.

Caps Lock and Spacebar = Scan Mode on/off (Narrator) Caps Lock and Z = Quick Keys mode on/off (JAWS)

Using a screen reader to navigate by Headings

| Jump to | Turn Scan Mode on (Caps Lock + Space) |
|-------------|---|
| next/previo | Letter navigation |
| us Heading | \mathbf{H} = Jump the next Heading |
| Keys (quick | Shift + H = jump to previous Heading |
| way) | Number navigation |
| | You can also use numbers to go the next heading: |
| | 1 = jump to next Heading Level 1 |
| | Shift + 1 = jump to previous Heading Level 1 |
| | 2 = jump to next Heading Level 2 |
| | Shift + 2 = jump to previous Heading Level 2 |

Activity - Selecting text and using cut, copy & paste (15 minutes)

- Find the **Activity Two word document**, in which I have created three mini-tasks to practise some of these hotkeys:
- Task One Adding Headings into a Word document for a screen reader user
- Task Two Navigate by Headings (slow way)
- Task Three Navigate by Headings (quick way)

Resources to teach headings and cursor navigation skills

- It takes hours of practice to embed some of these skills
- Teaching this skills to students can **be a little dull**... I found making engaging and fun activities a good way to help with this.
- I have **embraced the use of Generative AI** engines (CoPilot and Gemini) to help quickly make resources to help with some skills.
- I want to share some with you!

- Scrambled Sentences (select, copy & paste)
- Blackwood Manor Choose your own adventure (headings)
- Finn's Floating Summer comprehension (reading, headings, typing, cursor navigation)
- Daddy Robot Improve this sentence (typing, cursor navigation)
- Inside Out Information (headings)
- The Hillsborough Disaster 1989 (headings, cursor navigation, typing)

Concluding Thoughts

- By building these skills across key stages, we are introducing transferable, life-long tech skills that will help build a sense of job-readiness for our students.
- By using the familiar and 'safe' environment of MS Word, we can introduce skills and hotkeys that users can use across a whole range of apps that they will use throughout secondary, further and higher education.
- It is our duty as teachers for VI to ensure school-leavers have these skills to ensure they are in the best possible position to thrive.

Any Questions?

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