# Assistive Technology to Support Writing

**ACTU Team** 



### What is Writing?



WRITING IS A COMPLEX TASK THAT INVOLVES MOTOR (HANDWRITING), COGNITIVE (CREATING & COMPOSING WRITTEN MATERIAL) AND LANGUAGE SKILLS.



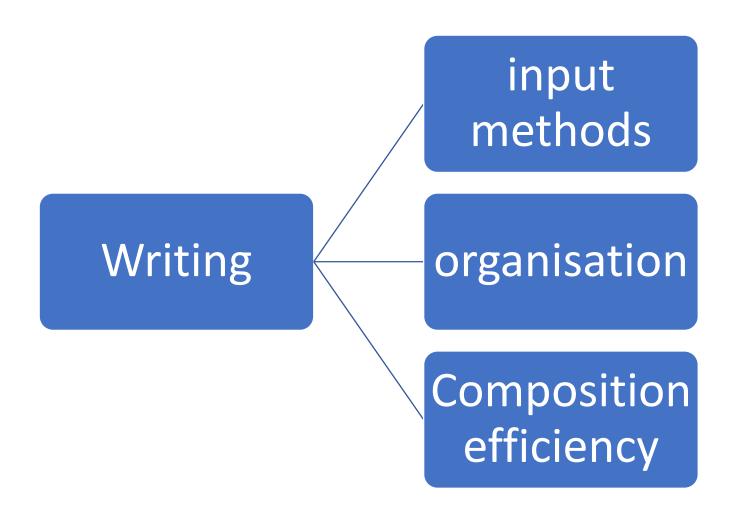
WRITING/TEXT/PRINT IS A WAY TO CONVEY A MEANINGFUL MESSAGE.



WRITING/TEXT/PRINT IS A CODE FOR SPEECH AND THEREFORE A WAY TO COMMUNICATE.



WRITING SUPPORTS
CHILDREN'S EARLY LITERACY
DEVELOPMENT.



Accept all forms of writing

Provide a variety of writing tools including Technology

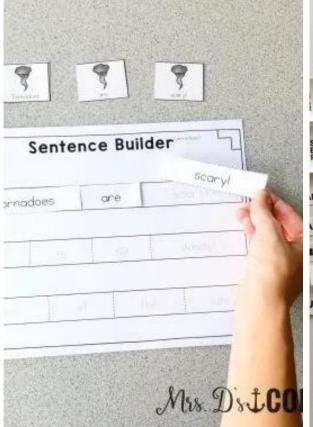
How to foster writing?

Write about favorite topics and for real reason

Model writing using the learner's preferred writing tool















Alternative "pencil": to address motor challenges

## Alternative "pencil": Touch Access









# Accessibility Features: Touchscreen

While the most direct access method Touch can prove problematic for some users.

- Assistive Touch (iOS) (Android)
- Touch Accommodations (iOS)
- Touch & Hold Delay (Android)











Alternative "pencil": Keyboards



#### Keeble

https://apps.apple.com/us/app/keeble/d918497054



Swiftkey (android and ios)



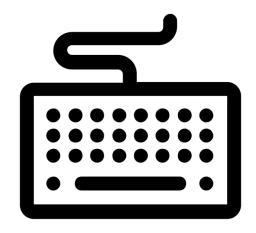
#### **Keedego Plus**

https://apps.apple.com/us/app/kee dogo-plus/id918496636

Alternative "pencil": On-screen Keyboards

#### Accessibility Features: Keyboard

- **StickyKeys** generate combination key presses by pressing the keys one at a time, rather than all together.
- Filter Keys (Windows) and Slow Keys (Mac OS) can help prevent many keyboard errors by adjusting the rate keys repeat when held down and ignoring rapid, repeated keypresses of the same key.
- MouseKeys lets you control the pointer using the keys on the numeric keypad rather than the mouse.
- Windows Settings & MacOS Settings

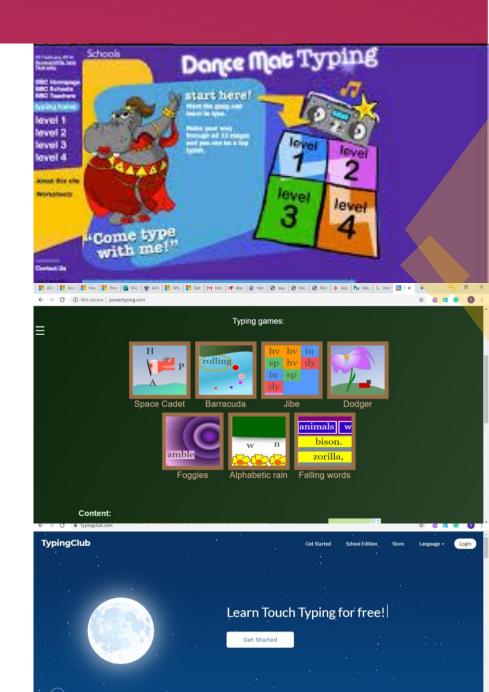


#### Touch-typing programs

BBC- Dance Mat Typing

Power typing

Typingclub



#### Alternative Mice

# Track Balls Joy Sticks

Laptop Touchpad

Ergonomics - Vertical









#### Alternative Mice

#### **Head Access**







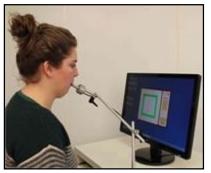
Eye Tracking







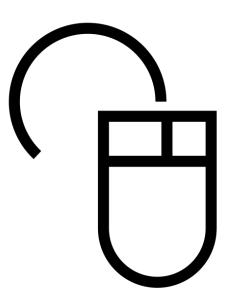




#### The Mouse

In both <u>Windows</u> and <u>Mac OS settings</u> on the mouse or touchpad can be adjusted so that it is much easier to use

- Switching Buttons
- Changing Double Click Speed
- Scroll Speed
- Sensitivity Pointer speed
- Snap to (Windows)
- Dwell (Mac OS)

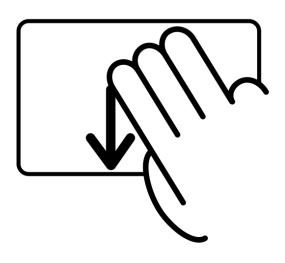


#### The Trackpad

In addition to the Mouse settings on the previous slide the trackpad can also be configured for gestures.

Trackpad (inbuilt or external) is a good option for those with limited range of motion (ROM).

- Trackpad Gestures in Windows 10
- Trackpad options in Mac OS



# Speech Recognition for Text Production

Useful for everyone, dictating to produce text requires some effort initially, once mastered it is the most efficient means of text production.

- <u>Dictation</u> limit of 30/40 Seconds, internet connection (iOS, MacOS)
- Enhanced Dictation (iOS 9 iPhone 6(S), MacOS)
- Windows Speech Recognition
- <u>Dictate plugin</u> in Microsoft Office 365 for Word, Outlook and PowerPoint; Onenote
- Google Docs (Chrome)
- Gboard (<u>Android</u>, <u>iOS</u>)



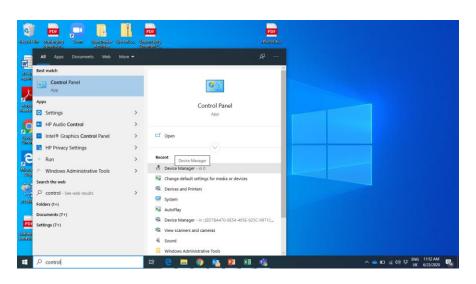
#### Voice Recognition software

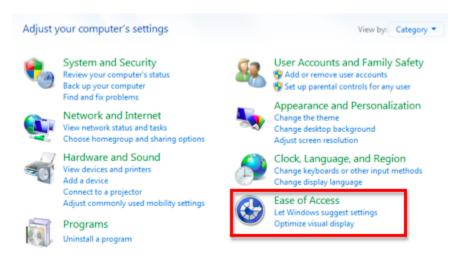




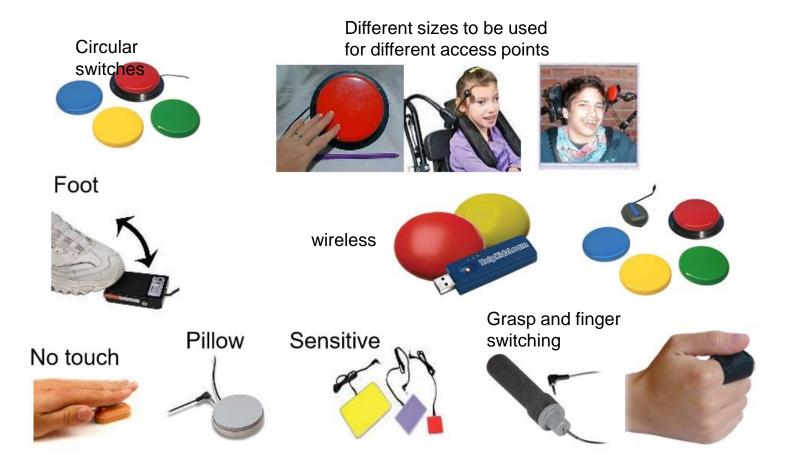


# How to set accessibility features on windows?





#### Alternative "pencil" - Switches





ADOBE FILL and Sign – Form Filler

App to support access to writing



#### AT tools – Text-to-speech

- Immersive reader
- Read and Write
- Claroread
- Chrome extension
  - citelighter



Text to Speech

## AT tools – Word Prediction/Wordbanks

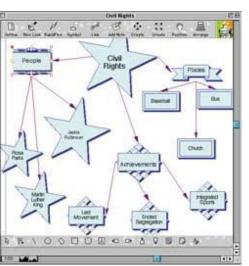
- Clicker 7/8
- WordQ 5
- Read and Write Gold
- Pen-Friend

## Grammer and Spelling Tools

- Grammarly :
   https://youtu.be/a4jT\_MLh1ul
- Accessibility Checker on Microsoft
- Rewordify:

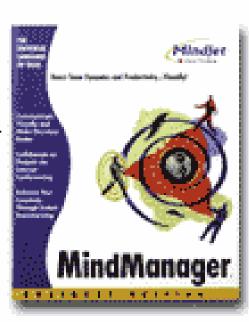
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https://www.youtube.com/watch?v=JaIjmdfYMd8&index
=14&list=PL7WWcal4bMQW1mRstGfMK jAru4siPv4p&t=0
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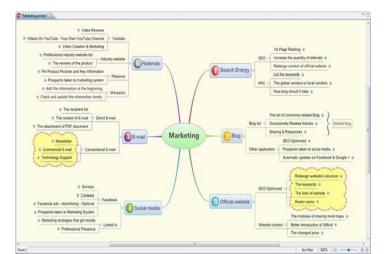
### Mind mapping



Inspiration /
Kidspiration.
Graphical
MindMapping for
outlining of Ideas.

MindManager - same concept





free downloadable software:

- Xmind / Freemind
- mindmup

#### Resources

Microsoft Education Software:

https://education.microsoft.com

Spectronics -

https://www.spectronics.com.au/article/literacy-support-software-comparison-chart

#### **Thank You**

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