

# Challenges

Learners with SEND often face challenges that impact the writing process and, in turn, productivity. This can be due to physical difficulties such as poor fine/gross motor skills or neurological challenges such as slow reading/writing speed, poor working memory, or brain fog/mental fatigue, causing symptoms such as reduced focus/concentration and processing.

Differences that can impact the writing process:

Dyslexia

Tourette's Syndrome

Visual Impairment

Dyspraxia

ASD

Meares-Irlen Syndrome

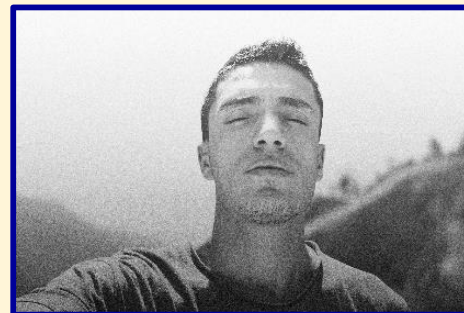
Hearing Impairment

ADHD

Dysgraphia

Mental Health Challenges

## How can learning to touch type help?



Levels the playing field

Instils confidence

Increases productivity  
& efficiency

Reduces anxiety

Used in exams

### It also:

Helps with challenges that impact the writing process.

Provides an alternate method for communicating and independent learning

and is often the key to accessing other assistive technology.

## Challenge

Cognitive  
Limitations

*e.g. Dyslexia, Dysgraphia, ADHD, ASD*

## How KAZ can help

- KAZ's 'Accelerated Learning' teaching method incorporates visual, auditory, and kinaesthetic elements to cater to different learning styles. It allows learners with cognitive limitations to hone in on their most comfortable and preferred style of learning. The multi-sensory approach simultaneously engages the major senses of sight, sound and touch, radically enhancing memory retention and recall, which is why it has proven so effective.
- If the teaching method closely matches the student's preferred way of learning, learning becomes more natural, making it more accessible and, in turn, faster – 'Accelerated Learning'.

# Challenge

Visual disturbances,  
impairment and  
processing

# How KAZ can help

○ At the start of the course, KAZ's customisable 'preference screen' helps address visual disturbances, impairment and processing challenges by offering learners a selection of preferences.

## Preferences include:

- VI option with dark mode setting, speaking keys & compatibility with screen readers, magnifiers and captioning
- Specialised filter screens that minimise blurring, steady letter movement and help address white screen glare
- Selection of font colours for contrast
- Dyslexia-friendly typefaces for ease of reading
- Selection of font sizes to prevent the crowding and fusing of letters
- Customised feature for students diagnosed with Meares-Irlen Syndrome and have an RGB reference

Once chosen, preferences are 'saved' and applied throughout the course, tailoring it for optimum visibility and comfort.

## Challenge

Poor working  
memory

*e.g. Dyslexia, Dysgraphia, ADHD*

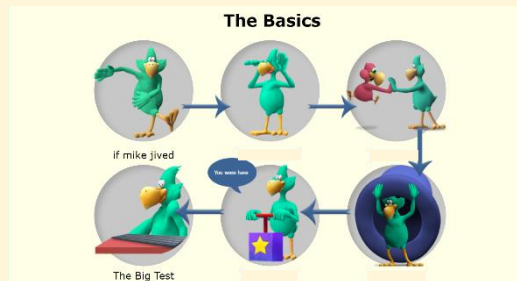
## How KAZ can help

- Working at a computer allows children to work in a non-linear fashion, where they can process their thoughts first and structure them later. This can help reduce mental load and anxiety.
- To suit learners who benefit from a clean, concise and direct learning environment, the KAZ course is presented light-heartedly and takes a structured, step-by-step approach to learning. This approach helps build confidence and allows learners to master one concept before moving on to the next, promoting a sense of accomplishment and reducing potential overload. This systemic progression can benefit learners who thrive on routine and predictability.
- The program is broken down into short modules to hold focus and concentration and allows learners to work at their own pace. It has been designed **NOT** to overload the working memory.
- Learners can return to any module at any time to refresh or practice on the 'Muscle Memory Builder Challenge' module, specially designed to accommodate students with short-working memory.

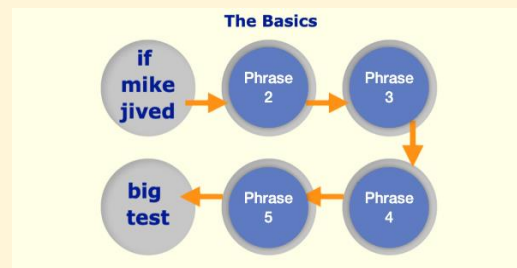
# Challenge

## Time Management

e.g. ADHD



6 -11 years



11 + years

# How KAZ can help

○ The 'Basics' section of the KAZ course teaches the a-z keys using five scientifically structured phrases, which take approximately 20 minutes each. It is based on the Pomodoro Technique – a time management method which involves working in short intervals, followed by short breaks.

○ It is designed to help learners resist self-interruptions and retain complete focus. Each Pomodoro is dedicated to learning one phrase using the keys taught in that lesson, and each break offers a chance to rest and reset before returning their attention to the next Pomodoro and phrase.

○ The learner repeats this cycle of Pomodoro intervals and short breaks until all five phrases are completed.

○ The method helps structure learning into short, focused periods and can help children with challenges such as ADHD who struggle with time management.

## Challenge

Difficulty with  
spelling

Children with differences such as dyslexia usually downgrade their vocabulary to play safe, using words they know they can spell correctly.

*e.g. Dyslexia, Dysgraphia, ADHD*

## How KAZ can help

- In the 'Challenge' modules, learners are presented with words they must type three times. They first see the word, then hear it and lastly, have to type it. This repetition helps ingrain spelling to 'muscle memory'. Eventually, spellings become a series of finger movements and patterns on a keyboard, dramatically reducing the likelihood of transposing and misspelling words.
- The method also trains learners to recognise words by sight, saving the decoding process, which often causes problems when reading.
- KAZ's site licenses allow for the upload of course-specific vocabulary, allowing children to learn to type and spell essential vocabulary simultaneously.



## Challenge

Slow work rate

*e.g. Dyslexia, Dysgraphia, ADHD, Tourettes*

## How KAZ can help

- Quick and accurate typing can reduce the time spent on a piece of work and often increases productivity and the quality of the work produced – helping with online assessments exams and dissertations.
- KAZ's 'SpeedBuilder' module offers two options for developing speed and accuracy. This is to ensure learners with greater challenges can build their efficiency slowly and without stress.

## Challenge

Poor and untidy  
handwriting

(Causing embarrassment, frustration and anxiety).

Perfectionism

(Due to obsessive compulsive behavior - can also lead to frustration and anxiety).

## How KAZ can help

- Teaching typing skills eliminates the need for neat or perfect handwriting, as it automatises the translation of thoughts and ideas into written language.
- The need for accurate letter formation and spacing words on a page is eliminated.
- Errors can easily be edited, without messy crossings out, resulting in neat and presentable work - automatically boosting confidence and self-esteem.

## Challenge

Poor coordination,  
fine/gross motor skills  
& physical dexterity

(Can make writing tiresome and even painful.)

*e.g. Dyspraxia, dysgraphia*

## How KAZ can help

- Teaching typing skills can help reduce physical pressure, cramp and pain in the hands and wrists, as lightly tapping keys on a keyboard can prove much easier than gripping and manipulating a pen or pencil.
- With practice and repetition, typing can enhance/develop fine motor skills, hand-eye coordination and physical dexterity.

## Challenge

### Difficulties with social interaction

Children with mental illness or ASD can find social interaction extremely challenging. The whole concept can cause anxiety and negative self-talk and can lead to depression.

*e.g. ASD, Generalized Anxiety Disorder (GAD)*

## How KAZ can help

- Teaching typing skills enables children to communicate with their peers and tutors without the need for social interaction on challenging days.
- Work can be submitted efficiently online.
- Children are also reassured by the fact that computers do not have faces or emotions.
- The KAZ course is an tutorial designed to be used independently, allowing children to learn the skill from wherever they feel most comfortable.

## Challenge

Difficulties with  
verbal / non-verbal  
communication

*e.g. ASD, Apraxia*

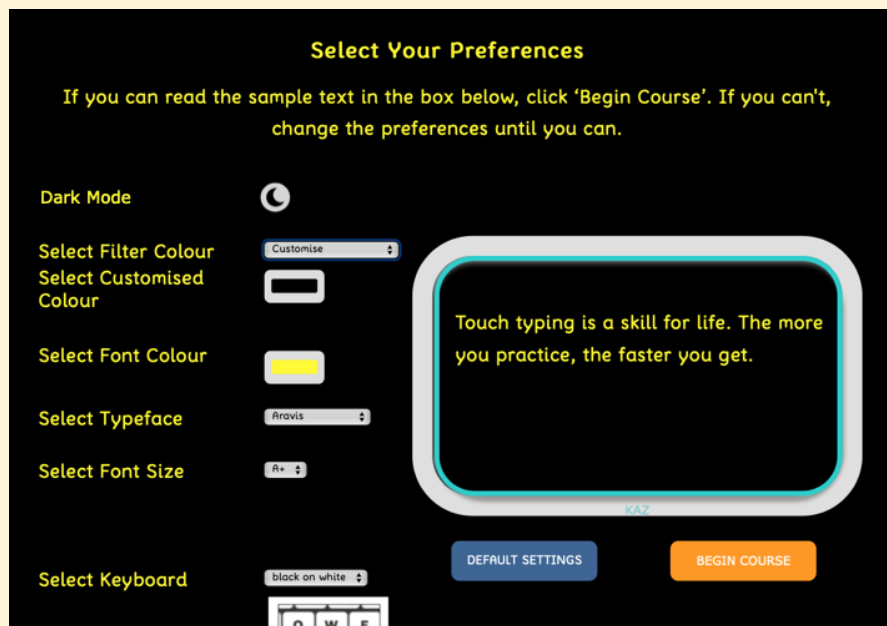
## How KAZ can help

- Teaching typing skills offers children an alternate form of communication. Their newfound ability to communicate can help build self-confidence and improve morale.

## Challenge

### Visual Impairment

Developed with advice and guidance from the Thomas Pocklington Trust



## How KAZ can help

- KAZ's customisable 'preference screen' offers a 'dark mode' option for visually impaired learners, which can be further adjusted.
- Compatible with JAWS and most other screen readers.
- Compatible with SuperNova and other magnification software, and captioning.
- Includes 'speaking keys' so learners can hear which key they have typed.
- Spoken instruction with auditory feedback on problematic keys.
- Tactile feedback - the software can also be used with a keyboard that has raised or textured keys, allowing learners to feel the keys as they type, helping with accuracy and speed.
- Learner will have the ability to enlarge the screen to the size of their monitor.

# Challenge

## Hearing Impairment



The screenshot shows the KAZ program's 'Select Your KAZ Version' page. At the top, there is a navigation bar with links for 'KAZ Online Home', 'User Guides', 'My Results', 'Admin', and 'Log Out'. Below the navigation bar, the title 'Select Your KAZ Version' is centered. There are three main options, each with a button, an icon, and a description:

- KAZ with Sound:** Represented by a headset icon. The text states: "This is our recommended choice. You can change to the 'Text version' at anytime during the course by simply clicking on the 'Sound Off' button."
- KAZ Text Version:** Represented by a person wearing glasses and a 'Sound Off' icon. The text states: "Choose this version if you are working in a quiet environment or if you have hearing difficulties."
- Audio Description:** Represented by an 'AD' icon and a person with a speech bubble icon. The text states: "KAZ with keystroke sound is an accessible version for visually impaired users - 'speaking' the A-Z keys as they are depressed within the exercises."

## How KAZ can help

- The KAZ program offers a 'text only', visual learning option, which means hearing impaired learners do not have to rely on audio instruction/cues and feedback.
- Learning typing skills offers children an alternate form of communication. Their new found ability to communicate can help build self-confidence and improve morale.
- Efficient typing skills can help promote independence in education and beyond, as learners can submit assignments digitally, email, fill out forms, or create documents.
- In today's digital age, strong typing skills are highly valued in many industries. By improving their typing skills, learners can increase their job prospects and compete more effectively in the job market.