

Accessible SEND/Neurodiverse Touch-Typing Software

Justification Guide

- KAZ's accessible SEND/Neurodiverse touch-typing software was developed with advice and guidance from the Dyslexia Research Trust (Reading Clinic & Oxford University) and the Thomas Pocklington Trust (Charity for the blind).
- It offers a unique teaching method that benefits students who struggle with traditional teaching methods.
- It teaches typing skills while addressing visual disturbances using a specialised preference screen, tailoring the course for maximum visibility and comfort.
- Its multi-sensory approach, customisable features, structured and focused teaching techniques, and dedicated module aiding short memory help provide valuable support to students while learning the skill.
- It is suitable for learners with one or a combination of the following neurological differences: Dyslexia, Dyspraxia, Dysgraphia, ADHD, ASD, and Tourette's, amongst others, as well as the hard of hearing, deaf, visually impaired, and blind.



• The program uses a unique and proven 'Accelerated Learning' teaching method. Incorporating 'brain balance', its 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.

The combination of KAZ's preference screen and its proven Accelerated Learning teaching method delivers a student-tailored, simple, but effective course.

Justifications for recommending KAZ's specialised software

Efficient touch-typing skills increase efficiency and productivity while promoting confidence, self-esteem, and independent working.

Visual Disturbances (e.g., Dyslexia, Visually Impaired)

KAZ's specialised 'preference screen' helps address visual disturbances by offering the learner a selection of preferences, such as filter colours, font colour and size, dyslexia-friendly typefaces, etc. Once chosen, preferences are 'saved' and applied throughout the course – tailoring it for maximum visibility and comfort.

Cognitive Limitations (e.g., Dyslexia, Dysgraphia, ADHD, ASD)

KAZ's multi-sensory 'Accelerated Learning' teaching method incorporates visual, auditory, and kinesthetic elements to cater to different learning styles. It allows learners with cognitive limitations to hone in on their most comfortable and preferred learning style. With this method, information is more likely to be remembered and retained.

Slow Work Rate - due to poor penmanship and processing. (e.g., Dyslexia, Dysgraphia, Dyspraxia, ADHD, Tourettes)

Quick and accurate typing reduces the time spent on a piece of work and often increases the quality and quantity of the work produced.

KAZ's 'SpeedBuilder' module offers two options for developing speed and accuracy, ensuring learners with more significant challenges can build their efficiency slowly and without stress.

Additionally, when used in exams, if learners can touch type efficiently and subconsciously, their 'conscious' mind can concentrate on more important literacy skills, such as the question at hand, planning, creative writing, processing, proofreading, and editing. It encourages learners to give fuller answers, and as typing is quicker than writing, it enables them to type as quickly as they think, allowing them to complete their paper.

Poor Memory / Working Memory - (e.g., Dyslexia, Dysgraphia, ADHD)

The KAZ course is presented in a structured and light-hearted manner and has been designed **NOT** to overload the working memory.

The program is broken down into short modules to hold focus and concentration. Learners can work at their own pace and return to previous modules to refresh. Alternatively, they can access KAZ's Muscle Memory Builder Challenge module, especially designed so learners with a short memory can refresh without revisiting previous modules.

Working at a computer also allows learners to work in a non-linear fashion, where they can process their thoughts first and structure them later. This can help relieve anxiety.

Poor Concentration and Time Management - (e.g., ADHD, ASD)

Breaking down lessons into short modules that can be repeated as necessary can help with concentration and focus, as can sitting down to regular short sessions at a computer.

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 that 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 learners with challenges such as ADHD who struggle with concentration and time management.

Poor Coordination, Fine/Gross Motor Skills, Physical Dexterity, and Hand Cramping - can make writing tiresome and even painful. (e.g., Dyspraxia, dysgraphia)

Teaching typing skills can help reduce physical pressure, cramps, and pain in the hands and wrists, as tapping keys on a keyboard can be much easier than gripping and manipulating a pen/pencil. It also eliminates the need for correct letter formation and spacing words on a page. Additionally, with practice and repetition, typing can enhance/develop fine motor skills, hand-eye coordination, and physical dexterity, particularly if the program is multi-sensory, as with the KAZ course.

Poor Handwriting - can lead to embarrassment, frustration, and anxiety. (e.g., Dyslexia - Dysgraphia - Dyspraxia - ADHD - ASD - Tourettes)

Teaching typing skills eliminates the need for neat handwriting, as touch typing automates the translation of thoughts and ideas into written language. Additionally, errors can be easily edited without messy crossings, resulting in neat and presentable work - automatically boosting confidence and self-esteem.

Difficulties with Spelling - (e.g., Dyslexia, Dysgraphia, ADHD, ASD) Learners often downgrade their vocabulary to play safe, using words they know they can spell correctly.

With KAZ's proven Accelerated Learning teaching method, learners are asked to type and re-type words. Spellings become a series of finger movements and patterns on a keyboard, dramatically reducing the likelihood of transposing and misspelling words. With this repetition, vocabulary gets ingrained into 'muscle memory'.

Additionally, the program uses only **'real words'**, and repetition of typing them helps train learners to recognise them by sight, saving the decoding process that often causes trouble when reading.

Visual Impairment & Blindness

KAZ's customisable 'preference screen' offers a 'dark mode' option for visually impaired and blind learners, which can be further adjusted to suit their needs. Once selected, all preferences are 'saved' and applied throughout the course.

The edition is compatible with JAWS and most screen readers, with SuperNova and other magnification software, and captioning.

It includes 'speaking keys' so learners can hear which key they have typed and spoken instruction with auditory feedback on problematic keys.

The software can also be used with a keyboard with raised or textured keys. This allows learners to feel the keys as they type, helping with accuracy and speed.

Hearing Impairment & Deafness

The KAZ program offers a 'text only' visual learning option, which means learners who are hard of hearing do not have to rely on audio instruction/cues and feedback.

Efficient typing skills can help promote independence while at university, allowing learners to submit assignments digitally, email, fill out forms, or create documents.

Learning typing skills offers students an alternate mode of communication. Their newfound ability to communicate can help build self-confidence and improve morale.

Difficulties with Social Interaction – (ASD, Mental Illness) Students with mental illness or ASD can find social interaction extremely challenging. The concept can cause anxiety and negative self-talk and can lead to depression.

Teaching typing skills enables students to communicate with their peers and tutors without social interaction on challenging days.

Work can be submitted efficiently online.

Students are also reassured by the fact that computers do not have faces or emotions.

The KAZ course is a tutorial designed for independent use, allowing students to learn the skill from wherever they feel most comfortable.

Difficulties with verbal/non-verbal communication – (ASD, Dyspraxia)

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

Perfectionism - due to obsessive-compulsive behaviour can also lead to frustration and anxiety. (e.g., ASD, Tourette's)

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easily be edited, resulting in neat and presentable work - boosting confidence and self-esteem.

Involuntary Tics - Related to the hands, fingers, wrists, arms, neck, head, and eyes. (Tourette's)

Teaching typing skills can help, as tapping keys on a keyboard can prove much more accessible for getting thoughts onto paper neatly while experiencing ticks. It eliminates the need for neat and correct letter formation and spacing. It saves embarrassment and promotes confidence and morale.

NOTE: SFE recognises that KAZ's SEND/Neurodiverse touch-typing software is an entirely different tool to dictation software and is happy for assessors to recommend it as a stand-alone product or alongside dictation software.

