

**INDEPENDENT
CREATIVE
EXPRESSION
ACHIEVING
POTENTIAL
...WITH TELL US ABEY**
COMMON CORE COMPATIBLE



WHO IS USING TELL US ABEY?

Tell us Abey is for students with verbal-expression and/or motor-planning challenges. Abey, the first user, is a smart kid with cerebral palsy and a movement disorder. He uses **Tell us Abey** to read Paddington chapter books, write poetry and short stories, calculate sabermetrics for the Philadelphia Phillies and to tease his brother and sister. He is a straight A student, despite his inability to speak, hold a pencil or type.

Curious, active and eager students want to articulate their thoughts and ideas and participate fully in their learning community.

Tell us Abey is the first in a new class of assistive technology, an Academic Achievement Assistant. Designed to be used by a disabled student

through the entire day, **Tell us Abey** allows students not only to learn information, but demonstrate their knowledge and actively participate in the learning community.

Elementary school students are using **Tell us Abey** to write book reports, take notes for that panda research project, and practice long division. They are using the technology bridge provided by **Tell us Abey** to ask questions in class, tell stories, and make social connections with their typical peers. Middle school students are using **Tell us Abey** to compare and contrast novels, evaluate probability models and take specialized high school admissions tests. They are taking standardized tests without scribes using **Tell us Abey's** testing module.

High school students are using **Tell us Abey** to research, write and edit critical essays, solve simultaneous equations, hand in homework electronically, and post to their Facebook pages. They are writing chemical equations, showing geometric proofs, and staying in touch with friends from camp.

Tell us Abey removes barriers to communication, making the education environment fully accessible.

HOW IT IS DIFFERENT FROM OTHER DEVICES

Tell us Abey recognizes that people with physical challenges have just as much desire and ability to use a nuanced and individualized language and vocabulary as any person who is able to use their vocal cords or a standard keyboard.

Tell us Abey has no pre-set phrases or answers and no multiple choice options. Many assistive technology devices restrict the expression of desire to a blunt "I want" button. **Tell us Abey** allows the user to say "I'd like," "I wish I had," "I really, really, really want," or any other formulation that best expresses his or her desire of the moment. Subtleties of expression give depth to conversation. **Tell us Abey** allows the nuanced language of an individual to come through.

Tell us Abey does math vertically, a necessity in higher level math. Other devices use a horizontal pattern, which becomes useless once a child reaches second grade math. **Tell us Abey** recognizes that in order to keep place values aligned, complex calculations must be done vertically. No adjustment to the course materials is needed. **Tell us Abey** allows all work to be saved and printed, and gives math students the ability to show their work, not just their final answer.

The software supports STEM (Science, Technology, Engineering and Math) curriculum like no other assistive system.

Tell us Abey has an unlimited text box. Most assistive technology devices are designed for casual conversation and, like a text message, quickly

reach their character limit. **Tell us Abey** not only allows the user an unlimited number of words, it allows the user to organize thoughts by chapters and projects can be saved and edited, over and over and over again. A person could use **Tell us Abey** to write the great American novel!

IN SCHOOL

Tell us Abey was designed to enable a student to produce work that meets all the requirements set by the Common Core Learning Standards in Mathematics and English Language Arts. The Common Core Learning Standards have already been adopted by 45 states (www.corestandards.org). In accordance with these standards, writing can be saved and edited, mathematical problem-solving can be shown in step-by-step detail, and all work can be both printed and emailed. **Tell us Abey** is updated regularly in order to keep up with the ever-changing standards.

Tell us Abey will support a student from the first day of kindergarten through all four years of a typical high school curriculum. Different modules assist in a broad range of academic subjects, including reading, writing, math and science. Using **Tell us Abey**, a student with special needs can participate fully in a typical standards-based school setting and thereby prepare for success and independence.

Tell us Abey follows students through their entire day. They write a journal entry. They read a novel. They prepare a physics lab report. They write a social studies term paper. (Coming soon: support for foreign language learning, musical notation and art!)

The Common Core Learning Standards require editing multiple drafts, "showing your work" in math, and referencing sources, all supported by Tell us Abey.

TRACKING PROGRESS

Assistive technology users rely on the number of switch hits they are able to make in an hour or a day as a measure of their ability to communicate.

Tell us Abey records every character in a log. A teacher or therapist can easily look back through these logs and see the progress that a student is making. Switch-hit data is also collected by the system and organized for review. The effect of new interventions – a change in medication, an adjustment in switch location – can be tracked to produce real data to support continuing the intervention or reverting to a previously successful approach.

Tell us Abey can be used to track Individualized Education Plan (IEP) goals in a measurable way. Occupational therapists, speech and language therapists and teachers can use the outcomes logged by **Tell us Abey** to support their evaluations and SMART Goal progress reports.

Tell us Abey has a testing module to support standardized testing while minimizing the need for scribes, rewriting, and hand bubbling the student's answers. Grid math allows the student to show their work. The testing module can easily be used for a chapter test or a spelling quiz in class.



This full size configuration has the 44" switch array, micro cpu, horizontal user screen, vertical content screen, and paper printer. An optional worksheet label printer is available. It has everything a student needs in the classroom to fully participate. Shown on the screen, grid math gives the student a framework to do math vertically, from place value organization in 2nd grade, to solving algebraic equations in 9th grade to vector calculus in college.

HOW IT WORKS

Tell us Abey is designed for users who are already reading and who understand the concept of writing, even if they have never before been able to put their words on paper. The system uses an array of six switches which make detailed written communication possible for a person who does not have the fine motor skills to use a standard keyboard. Each switch-hit activates a dynamic on-screen button. Through switch-hits, the user independently drives the program. Writing via the six switch array is much like writing a text message on cell phone that doesn't have a full keyboard. This written communication can be saved, edited, printed, and emailed. It can be posted to a blog or to Facebook.

The switch array facilitates use by students who have typical cognitive abilities but whose fine motor skills are delayed.

Tell us Abey comes with a content screen, a user screen, and a six-switch array and has multiple printing options. The horizontal user screen displays the

on-screen buttons and has a content area. The vertical content screen displays a large block of work, facilitating editing written work and doing longer math problems. The content screen can display Kindle documents or previously saved projects, while the user screen allows the student to take notes or compose an essay from an outline. The six switches are color-coded to correspond to on-screen buttons. Using the switches the student can navigate the entire system with no one else's input. Work can be printed on letter size paper or an adhesive label printer for filling in worksheets. The student can write, do math, save in-progress work and return to it later, edit it, and print it out.

Tell us Abey comes in a portable version, which consists of the six-switch array and a laptop or netbook. It has most of the same functions as the full-size version, but lacks the content screen.

Tell us Abey can be accessed by touch screen, mouse, joystick and eyegaze.



This portable configuration consists of a net book and 28" switch array that fit in a custom case. The small size makes it perfect to take on trips, commute to school or work, or bring to a friend's house for a party.

IN ACADEMICS

Reading

Tell us Abey has an embedded application to operate Kindle® software. This software opens the door to millions of volumes, the same volumes available to the typical student. **Tell us Abey** allows students to adjust font sizes, turn their own pages and read at their own pace. These options give students control over their learning environment and foster independence.

Writing

Tell us Abey makes it possible for the writer to produce work that is identical in format to that written on a typical computer keyboard. Writing can be saved, edited, printed and emailed. In accordance with Common Core Standards, **Tell us Abey** has subscript and superscript functions which give the user the means to annotate or include footnotes and create a full bibliography.

Tell us Abey supports working in teams, demonstrating mastery and making well-reasoned arguments, toward greater academic success.

Math & Science

Tell us Abey provides a grid of boxes in which the user can set up mathematical equations – from the first-grader's simple sums to the high

school senior's complex algebra problems. This module can be used to do long division and to solve multi-part word problems. The switches allow the user to move around the grid and enter numbers, operation symbols, units (inches, gallons, pounds, angstroms, etc.), variables and constants.

Tell us Abey already supports the language of geometric proofs, trigonometry and calculus; future versions will expand to support drawing in 2D space!

Tell us Abey supports high school level chemistry and physics. The same subscript and superscript functions which allow a writer to build a bibliography also enable the budding scientist to write chemical formulas and equations and use scientific notation.

Tell us Abey is patent pending.
Tell us Abey is made in New York City.