

The Ohio Senate Education Committee

Testimony on Am. Sub. H.B. 33

Chair Brenner, Vice- Chair O'Brien and Ranking Minority Member, Ingram, I am Dave Schleppenbach and I am the President and CEO of Tactile Engineering. More importantly, I am the inventor and developer of the Cadence Tablet

I have developed this device because blind individuals deserve the same opportunities in life as their sighted peers, but the world is online now and traditional tools just aren't cutting it. They want to be productive, feel valued, and have the independence to interact with the digital world without assistance.

That's where we come in. Our team has developed a braille tablet that empowers the visually impaired to overcome these challenges at school, in the workplace, and in life.

This revolutionary platform enables blind and visually impaired people to succeed on their own terms.

People have always pursued accommodations for the blind, but a major milestone was Louis Braille's adaptation of existing writing systems for the blind into the braille language, which became a worldwide standard.

As technology advanced, so did methods of producing braille, from the mechanical Perkins braille typewriter to modern braille printers and electronic braille displays. In addition, the advent of audio and computer technology enabled options such as books on tape, speech synthesis, and more recently, accessible smartphones using voice assistants like VoiceOver and TalkBack.

However, these technologies, while truly beneficial, are unable to provide access to graphics, images, animation, and effective literacy training, all of which are critical for equity in education, career choice, and leisure activities. Tactile Engineering exists to remove these barriers.

The Cadence Tactile Graphics Tablet is an unprecedented advance in assistive technology: a portable device that enables the blind to feel images, animation, and pages of braille text. With the Cadence tablet, blind and visually impaired people can use scientific tools to gather data in real time, collaborate with colleagues and coworkers remotely using editable graphics, access a worldwide library of braille books, or simply play a video game with friends.

Whether you're visually impaired, blind, or part of an organization seeking to employ, empower, or educate a talented but underserved sector of society, the Cadence tablet will transform the way you view the world.

The Cadence tablet is truly a game-changer for blind and visually impaired (B/VI) individuals of all ages.

From Childhood: Children are voracious learners, and the Cadence tablet provides B/VI kids with a gateway to literacy, creativity, and the power of imagination. The portable tablet enables kids to learn braille on their own time, in any environment, with fun educational activities, animation-enhanced stories, and shareable drawing tools.

At School: Every blind student we've met wants to excel, but shortages of braille and trained educators are tough barriers to overcome. The Cadence tablet brings equity to the classroom, enabling B/VI students to carry all their textbooks in their pocket, participate fully in lab experiments, study STEM content more easily, and take computer-based standardized tests. The barriers become a limitless horizon.

In the Workplace: The ability to work collaboratively on tables, charts, presentations, and equations increases comfort, security, and productivity for B/VI individuals seeking fulfilling careers.

With Family and Friends: No one should miss out on the fun side of life. The Cadence tablet can show the path of a quarterback heading for a touchdown, set up a family-night video game, connect friends all over the world, and enhance movies and TV shows with descriptive text and animation.

We know you want to provide the best, most effective assistive technology and accommodations for blind and visually impaired (B/VI) individuals to provide full opportunities to a growing population of enthusiastic students and professionals. We can help in all environments.

In education settings, B/VI students too often are left behind by a combination of insufficient resources, unavailable teachers, and cumbersome materials. The Cadence tablet provides mainstream teachers with convenient braille translation and image conversion tools, districts with site licenses and robust maintenance and repair options, and test services with secure and rapidly deployable systems for legally compliant assessments.

In employment settings technology has improved workplace accessibility in the 21st century, but braille literacy and availability of graphical content are both critical to high-demand STEM careers and advancement. The Cadence tablet offers a cost-effective solution that supports customization for user and workplace needs.

Services for people with disabilities are mandated by law, but the reality often falls short. According to the National Federation of the Blind, up to 70% of blind adults are unemployed. Uninterrupted access to Cadence tablets can drastically change that unfortunate statistic, allowing B/VI adults to join the workforce on their own terms.

When people with disabilities have the opportunity to learn, hone skills, and contribute their knowledge to the workforce and society, they gain confidence, financial independence, personal security, and increased options for the future. Perhaps most importantly, they cease being "people with disabilities," and are simply members of the community, of society, of humanity.

For these reasons, we would ask you support to fund the Ohio School for the Blind to acquire these Braille tablets for their students. I am happy to try to address your questions.

Referenced videos:

[“Tactile Engineering Creating Tablets for Vision Impaired”](#), 2:11

[“Connecting communities with the help of Gaming”](#), 0:21