



Assistive Technology: Helping Children With Special Needs In NC Public Schools

By Jennifer Key

May 13, 2023

Around 200,000 students in North Carolina need special education services, NC Newsline reports. In particular, nearly all of the state's 115 public school systems have identified over 13% of their students as needing those services. Yet, North Carolina's school system remains vastly under-funded and under-resourced when it comes to serving students with disabilities. By investing in assistive technology – tools, toys, and software that help children overcome learning barriers – public schools can better empower all students to learn, communicate, and manage sensory challenges.

The need for special education funding

North Carolina sadly has a long history of special education funding limits. In 1993, a statewide cap was placed on how many students with disabilities can be counted toward funding – completely disregarding how many students actually need this funding, or what disabilities they have. And, in 2023, that cap has only since slightly increased: it's now at 13%. That's despite the fact students with disabilities cost around 2.3 times more to educate than students without disabilities

In recent years, however, North Carolina's public schools have been successfully accessing new sources of funding. For example, Medicaid is increasingly used to cover the cost of health services, with schools across the state now being regularly reimbursed at least \$100 million every year – that's up from just \$16 million in 2008 (this figure also covers healthcare for students without disabilities and individual education plans). North Carolina officials are also in the middle

of researching special education funding (specifically looking at cost of services) in a potential effort to make improvements. However, it's not yet known if any considerable adjustments will consequently be made, since similar studies have been done in the past to little effect.

Communication tools

With funding difficulties ever-present, affordable tools play a key role in helping North Carolina's public schools better serve children with disabilities. Picture boards and picture cards, in particular, are a simple yet effective way to aid children with communication. For example, cards with common phrases (such as "yes/no", "I need help", and "bored/worried/happy") are a useful way for children to communicate their needs in a classroom setting. Alternatively, there are a number of speech-generating apps available. Assistiveware's Proloquo2Go, for example, is designed with natural-sounding voices, including children's voices, and is packed with over 10,000 words. The app is fully-customizable and can help build and strengthen each student's language skills as needed.

Creating sensory-friendly classrooms

Sensory challenges in the classroom can take shape as either hypersensitivity (over-responsiveness) or hyposensitivity (under-responsiveness). So, for example, a school bell or fire alarm may be painful for students with sensory issues, while a physical injury may barely register. Fortunately, adaptive technology can be used to calm the nervous system, lessen anxiety, and improve focus in the classroom. For example, fidget spinners are a simple tool that keep hands occupied and improve concentration. In fact, a recent study found fidget spinners can improve on-task classroom behavior for students with ADHD. Gender neutral toys like fidget spinners can also play a key role in creating an inclusive classroom. By allowing children to play with any and all toys they're drawn to, they'll be free to reach their full potential without feeling limited in their play.

Navigating intellectual challenges

Assistive technology can also help with intellectual disabilities in the classroom. It's estimated, for example, around 30% of children with autism spectrum disorder also have intellectual disabilities. Children with intellectual disabilities may find it difficult to process both verbal and written communication, making math particularly difficult, for example. Visual style learning is typically most effective for children with autism, and, as such, manipulatives (hands-on objectives and activities) can be used to enhance learning. Manipulatives give children the opportunity to practice, play, and actually see the topic at hand. Similarly, video is also an effective alternative to written and spoken lessons. Moreover, children with executive functioning difficulties may also find it difficult to plan, prioritize, and stay on task during lessons. In this case, written lists and planners, visual reminders, and color-coded schedules can be used to improve the learning experience. Additionally, visual timers, calculators, and watches with alarms can further help children stay focused and on schedule.

Children with special needs require greater funding and support in North Carolina's public schools. By investing in the right assistive technology, educators can successfully create inclusive classrooms that help all children, including those with special needs, thrive.

The views and opinions expressed in guest blog posts are those of the guest bloggers and do not necessarily represent the views of Public Schools First NC, its affiliates, or staff.



Public Schools First NC

publicschoolsfirstnc.org * info@publicschoolsfirstnc.org

Instagram: [@publicschoolsfirstnc](https://www.instagram.com/publicschoolsfirstnc) * Facebook: [Facebook.com/publicschoolsfirstnc](https://www.facebook.com/publicschoolsfirstnc) * Twitter: [@PS1NC](https://twitter.com/PS1NC)