

# INTERACTIVE CLASSROOMS BENEFIT STUDENTS WITH DISABILITIES





#### NAME:

at Kennedy Krieger Institute

Kennedy Krieger Institute's Department of Special Education

> LOCATION: Baltimore, MD

#### **SCHOOLS:**

- Kennedy Krieger Lower
  / Middle School
- Kennedy Krieger High School Career and Technology Center
- LEAP Program (Life Skills and Education for Students with Autism and Other Pervasive Behavioral Challenges)
- Public School Partnership Programs
- Kennedy Krieger Montgomery County School

#### TYPE:

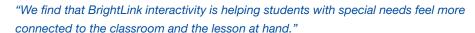
Special Education division of Kennedy Krieger Institute, a non-profit medical, educational, and research organization focusing on developmental and physical disabilities

STUDENTS: 640+

WEB SITE:

www.kennedykrieger.org





 David Toothe, Associate Director of Information Systems for Special Education, Kennedy Krieger Institute

**KENNEDY KRIEGER INSTITUTE** 

+ BRIGHTLINK® PROJECTOR

Teaching children and adolescents with mild-to-severe developmental and physical disabilities takes the right measure of understanding, skill, and supportive classroom tools. The Kennedy Krieger Institute in Baltimore, MD each year helps more than 16,000 children and young adults with special needs. The non-profit institute improves thousands of lives with inpatient and outpatient clinics, home and community services, school programs, and scientific research.

Adding interactive technology to Kennedy Krieger's school classrooms has proved invaluable in teaching students with diverse disorders, including autism, learning disabilities, speech/language disorders, orthopedic disabilities, and traumatic brain injuries. Awarded the Blue Ribbon School of Excellence, Kennedy Krieger's day schools and public school partnerships create model programs to develop the academic, social, emotional, and behavioral skills of 650+ students from age 3 to 21.

Kennedy Krieger's Department of Special Education installed 20 Epson BrightLink® interactive projectors, an ultra-short-throw projector + pen combination, in classrooms on its three campuses in Baltimore City and Montgomery County. With interactive capabilities built into the projector, BrightLink gives teachers the flexibility to turn many types of surfaces such as dry-erase boards, walls, or chalkboards into interactive learning areas.

#### FOCUSING SPECIAL NEEDS STUDENTS

"Although no strategy ever works for all disorders, we find that BrightLink interactivity is helping students with special needs feel more connected to the classroom and the lesson



at hand," said David Toothe, Associate Director of Information Systems for Special Education at Kennedy Krieger. "Many typically reserved students now participate more fully, with improved eye contact and speech, while those with behavior issues tend to disrupt the classroom less often because the projector's interactivity can tune out distracting stimuli."



Some students with disabilities such as autism may react aggressively if routines are upset, so the interactive projector can bring a sense of stability to the classroom and help students feel safe. With BrightLink interactivity, teachers can set up specific schedules, focusing the class on one thing at a time while introducing new information in a familiar format.

"BrightLink is an important part of our morning opening routine," said 8th grade teacher Carrie LaBar. "My students use a flipchart to identify calendar information and complete a daily poll each morning by coming up to the board." Throughout the day, the teacher finds that students are very motivated to use the board, which helps keep them focused.

Some kinesthetic learners who have difficulty sitting at their desks for long periods of time are given the opportunity to move in the classroom and learn by doing. Teachers also find the projector useful in teaching social thinking curricula like Superflex®, in which a comic book hero appears onscreen to show younger children with autism how to be aware of social expectations and modify their own behavior.

For some lower functioning students, use of the BrightLink interactive pen has been a breakthrough in classroom learning. It allows interactive lessons to be taught in a

group setting, rather than one on one with a touchscreen monitor or other device. Since some children with disabilities have difficulty establishing the connection between two objects, the BrightLink pen helps them tie the movement of the hands and eyes to onscreen activity where they can see direct results.

# K-8 STUDENTS RESPOND TO VISUALS, INTERACTIVITY

Like many teachers at Kennedy Krieger schools, Claire Donehower uses the BrightLink to teach a variety of subjects to her K-2 students who are diagnosed with disabilities such as autism, ADHD, intellectual disability, disruptive disorder-NOS, bipolar disorder, and expressive/receptive language disorder. In reading and phonics class, BrightLink helps her class make predictions, decode sight words, sequence the events of a text, and sort words by sound.

"There is no doubt that my younger students are more engaged in lessons across content areas by using the Epson BrightLink," said Donehower. "Guided practice opportunities are productive for all students because of the large, interactive display. Similarly, independent practice and formative/summative assessment activities that used to be non-preferred are now a chance for them to show their classmates what they know in a fun, new way."

The BrightLink gives students a visual representation as well as an auditory and kinesthetic representation of the lesson material. Art teacher Claire Strock uses the BrightLink daily in the art room for her K-8 students. "I use it to show my students artist exemplars, links to artist websites, and step-by-step





photos and videos of art making processes," Strock said. "Students do sketches using drawing applications on the board. They are able to trace works of art, identify art elements like colors, shapes, lines, textures, and forms in a work of art by highlighting with the pen."

## **ENGAGING HIGHER GRADE LEVELS**

High school teacher Elizabeth Coll finds that students with special needs at higher grade levels also benefit from the visual representation of materials and the opportunity to apply BrightLink's interactive features. "The projector provides great visuals for these students to look at while I'm teaching, including pictures, readings, activities, videos, and worksheets," said Coll. "It allows them to participate in interactive activities such as answering questions on the board and playing learning games."

In another high school classroom, Sarah Hammond uses the BrightLink with the school's standard curriculum software solution, creating flipcharts for subjects such as English, Life Skills, and Social Studies. For English, she uses the BrightLink to review vocabulary, main elements, and key characters. "During geography lessons, I often use the Internet to project and study images of countries using GoogleMaps," she said. "I've found that my high school students are more engaged in the material during the lesson and seem to retain more information with the BrightLink in my classroom."

Down the hall, high school biology classes are constantly taking notes and reading material from the textbook, so the BrightLink is an essential visual aid to make sure the students with disabilities are highlighting the right information. The teacher also uses it to work on virtual labs and for activities that require students to go up to the board to answer questions. Another teacher created a battleship game, where students gleefully sink ships if they answer a sequence of questions correctly.

### **ANCHORED YET FLEXIBLE**

Anchored near the wall above the display, BrightLink has a larger and wider display size than many interactive whiteboards. "One of the features the teachers like the most about the BrightLink is that they are able to keep their dry-erase boards," said Toothe. If teaching a lesson with a dry-erase pen, instructors can turn on the BrightLink projector and seamlessly glide into an interactive lesson without moving to another part of the classroom and causing some students to lose focus.

"Every day I am learning about new possibilities in engaging my students further with BrightLink," said biology teacher Ité Clary. When combined with good teachers, patience, and skill, BrightLink is interactively helping Kennedy Krieger cultivate the individual strengths of children and young adults with a wide range of disorders as they learn to live in today's world.



Epson is a registered trademark and Epson Exceed Your Vision is a registered logomark of Seiko Epson Corporation. BrightLink and Brighter Futures are registered trademarks of Epson America, Inc. Copyright 2011 Epson America, Inc. Product specifications are subject to change without notice.