ROBOKIND®

Outcomes Report

Fall 2024

Special Tech for Exceptional Connections

At RoboKind, we believe in the power of special technology to drive exceptional outcomes. Our mission is to offer engaging, equitable, and effective curricula, designed specifically for teachers, special education classrooms, and neurodiverse students.

We partner with educators to create meaningful learning experiences for every student. This report showcases the measurable impact of our RoboKind Social Skills and RoboKind Phonics programs, supported by research, user data, and invaluable insights from our partners.



Special Teachers - Exceptional Stories

Our Vision

RoboKind envisions a future where ALL students and their teachers are able to celebrate the joy and success of learning together.

Our Mission

By providing appropriate, equitable, engaging, effective learning opportunities centered on strong pedagogical framework, research-based and play-based strategies, and I-VAKT™ (Interactive Technology, Visual, Auditory, Kinesthetic, and Tactile) experiences, we can develop neural pathways for mastering foundational competencies that respect the accessibility needs of neurodiverse, early childhood, and all students.



Research & Reports

Overview of RoboKind's Curricula

RoboKind's vision and mission are rooted in the core of teaching: providing every student with an equitable, enriching experience. Teachers have the power to unlock the potential of all students, particularly in classrooms with diverse needs. With the rise in neurodiverse students—those with conditions like autism and dyslexia—teachers face both new challenges and exciting opportunities.

Neurodiversity affects approximately 15-20% of the population, a figure reflected in today's school demographics (Edutopia, 2023; Understood, 2024). Meeting the needs of neurodiverse students is key to creating inclusive and effective learning environments (OECD, 2023). By embracing inclusive strategies, we can ensure that every student thrives in a supportive, equitable classroom.

Founded in 2011, RoboKind is dedicated to advancing equity in education, particularly for neurodiverse students, through innovative assistive technology. Our journey began with Milo, a humanoid robot designed to help students with autism master social skills. Since then, we've expanded with Jemi, Veda, and Carver, creating a team of robots and virtual avatars. Today, the RoboKind Social Skills Curriculum utilizes 22 of the 28 Evidence-Based Practices (EBPs) recommended by the National Autism Center in their 2009 National Standards Report.



"I previously had to hunt and peck for curriculum. This provides evidence-based consistency for the kids"

Chemise WallaceRichland School District One , SC

Engagement Levels

The outcomes from over a million RoboKind Social Skills lessons are highly encouraging. We're staying true to our vision of improving learning outcomes for neurodiverse students. After engaging with the RoboKind Social Skills curriculum, students demonstrate enhanced social skills, increased engagement, and significant progress toward their Individualized Education Program (IEP) goals (Raiford, 2021; Kroiss, Sonego & Rollins, 2021; McCarthy-Teszler, 2021; Schamens, 2017; Margow, 2012).

Let's look at the evidence in detail: Students are mastering IEP goals and acquiring social skills.

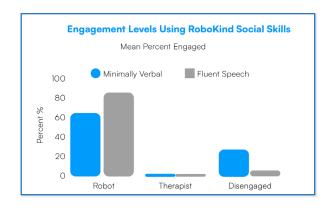
A three-year study by the South Carolina Department of Education tracked the progress of students with Autism Spectrum Disorder (ASD), on their social skill development. The results showed that 65% of the students mastered at least one IEP goal, and all demonstrated significant improvement regulation, emotional effective communication, and social interactions (Raiford, 2021).

Additionally, within the same group, 100% of the students made progress toward their IEP goals, particularly in behavior management and social interactions (McCarthy-Teszler, 2021).

A separate case study of a 39-yearold resident with intellectual and mental health disabilities highlighted improvements in attention span, communication, coping skills, and social interactions (Schamens, 2017).

Students are engaged.

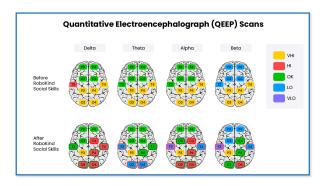
One study demonstrated **engagement levels** of students with autism spectrum distorder (ASD) **increased to 88%** during therapy sessions (Kroiss, Sonego, &



Rollins, 2021).

Neuropathways are being created.

Quantitative Electroencephalograph (QEEP) scans before and after engagement with RoboKind Social Skills revealed enhanced activity in brain areas responsible for emotional processing and communication



(Margow, 2012).

RK

Statewide Case Studies

Indiana Department of Education - 2024

Effective, Engaging, Equitable: RoboKind's Impact in Indiana

Social Skills are critically essential to autistic, neruodiverse, and intellectually disabled students. They are are difficult to master, and even harder to teach. RoboKind combines assistive technology with meaningful curriculum that accelerates measurable outcomes for these marginalized students. With our social skills program, students first learn calm-down techniques before moving into more complicated skills like emotional understanding and conversational dynamics.

Thanks to funding provided by the Indiana Department of Education, we have welcomed **28 partners**, celebrating student success across the state.



By the Numbers: Usage August 2023 - February 2024

28 Participating Sites

496 Active Students

45% Student Lesson Mastery

61% Lesson Engagement

62% Students Completed Lesson Feeling Positive

8,203 Lessons Completed With Robot or Virtual Avatar

46% Sites Using the Virtual Avatar

15.2 Average Usage Minutes/Student/Week



Scan to View

Crown Point's Testimonial

"We are very thankful to partner with the state and with RoboKind to deliver this to our classrooms. We're excited to see the growth our students will make."

Kelly Oost

Assistant Director of Exceptional Education Crown Point Community School Corporation "[Milo] can reach [my students] at a level that I cannot as an adult... We have already seen such growth in many of our students"

Carey A Northcutt, Exceptional Students Teacher Metropolitan School Disctrict of Lawrence

"I love the program, we have students that we didn't know had this kind of academic capability!"

Casey Hutton, Special Education Teacher South Ripley Community School Corporation





South Carolina Department of Education

A 3-Year Pilot & Study on The Efficacy of Robot-assisted, Social Emotional Programming & Curriculum for Students with Autism (Dr. Lisa O. Raiford)

Executive Summary:

RoboKind Pilot in selected schools in South Carolina was an overall success. Data indicates that students moved through lessons as guided by their Individual Education Programs and mastered the lessons within. Further data, from teacher observational data, indicated that once students mastered the lessons in the curriculum, they moved on to generalizing the skill in the natural environment.

"Before Milo, we tried to do a lot of role play and situational things. But with Milo... they feel very special with him - it's almost like a reward."

> Ross Goodacre Teacher Pickens County, SC

Implementing teachers indicated, repeatedly, that students learned the lessons in the Calm Down Module, in which the use of a calming strategy or tool was taught, quickly and that knowledge was retained. These lessons did not require as much repetition as lessons in other modules. While the lessons in the Emotional Understanding Module were accessed and repeated the most, the lessons in the Conversational Module were frequently accessed as well.

Read More >

Alabama State Department of Education

Preschool Innovative Projects Grant

RoboKind has been awarded partial funding through the Alabama State Department of Education initiative grant to support early students in developing essential emotional, behavioral, and communication skills.

"I love this program and watching the students make progress with their day to day skills influenced by RoboKind. It's truly amazing"

> Hannah Carr Paraprofessional Marshall County, AL

RoboKind Phonics developed and tested in SPED Classrooms

RoboKind Phonics Beta Focus Group

The impact of the RoboKind Phonics Beta program on early childhood reading education in special education classrooms was evaluated across six different schools.

The program, which uses a humanoid robot and a multi-sensory approach, was implemented over four weeks. The results showed significant improvements in students' reading skils and attitudes towards reading. DIBELS (Dynamic Indicators of Basic Early Literacy Skils) scores improved, with Correct Letter Sound (CLS) scores increasing from a pre-median of 42.5 to a postmedian of 138, and Whole Words Read (WWR) scores increasing from a pre-median of 11 to a post-median of 46.5.

Teacher-reported student engagement rates increased from 70% to 95%, and student self-reported engagement increased from the 71st percentile to the 85th percentile.

The study highlights the potential of innovative, research-based programs like RoboKind Phonics to improve early childhood reading education, particularly in special education classrooms. Read More >

"This is going to be life changing for students!"

Jill Mires
Superintendent
Salem Community Schools, IN

Ludus Reading and RoboKind™ Robots Increase Early Literacy Rates

The research study aimed to examine the influence of a new model for reading instruction combining Ludus Reading and RoboKind™ Robots on first-grade students' phonics skills and attitudes toward reading. Ludus Reading phonics instruction involves explicit and systematic lessons with underpinnings in play-based, technology, and multisensory techniques. RoboKind™ Robots are facially expressive, assistive humanoid robots that can be coded to talk, move, and display images on their chest screen.

The RoboKind™ Robots were programmed to act as teaching assistants and help the teacher during the Ludus Reading phonic lesson. A quasi-experimental pre-post design was used to examine three research questions comparing the differences between pre-and post-scores when using Ludus Reading and RoboKind™ Robots in terms of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS®) Correct Letter Sound (CLS), DIBELS® Whole Words Read (WWR), and Elementary Reading Attitude Survey (ERAS) scores between the group receiving Ludus Reading and RoboKind™ Robots instruction and the control group. The null hypotheses for Research Questions 1–3 were rejected.

The results supported the use of Ludus Reading and RoboKind™ Robots to teach phonics because the experimental group demonstrated a statistically significant increase in their ability to decode and a positive attitude toward reading.

Read More >

By the Numbers

360 School Sites

36,881 Lessons Ran

18,907 Robot-led

17,974 Avatar-led

242,492 minutes in program

Data pulled from 10/1/23 - 10/1/24

Post-lesson reports show...

75% of students finished RK lessons reported feeling "happy" or "calm".

Students leave
RoboKind lessons less
angry and anxious,
and more confident
and happy.

93% of students finished RK lessons reported feeling happy, calm, confident, or excited.

Virtual Avatar Experience

Multisensory Strategies that Create Fun Foundations

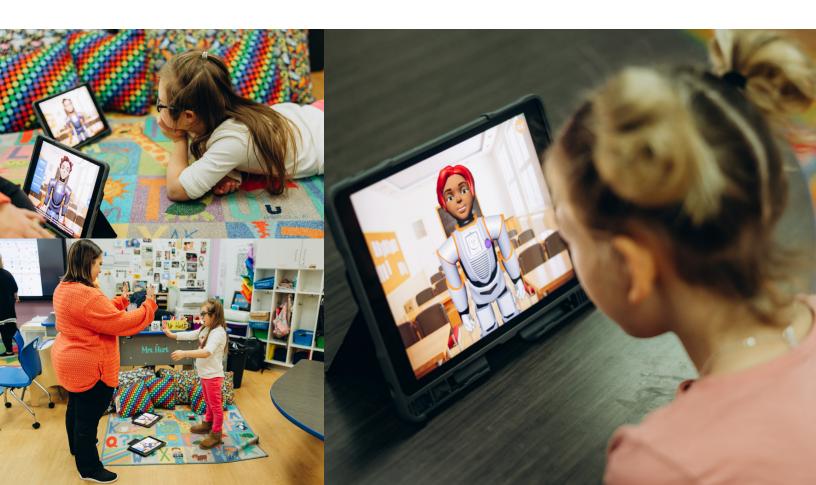
RoboKind's Virtual Avatars are transforming the way students interact with curriculum and achieve their goals! These engaging, interactive avatars create a gamified learning experience that incorporates Evidence-Based Practices like Visual Supports, Video Modeling, and Social Narratives. Through multi-sensory inputs and playful learning strategies, students can light up their brains and thrive in an immersive educational environment.

Supporting the "each" in teaching.

Developed to create equitable experiences for diverse students, RoboKind's Virtual Avatars ensure accessibility to all RoboKind curricula through any of our four unique characters: Milo, Jemi, Carver, and Veda.

Special Tech for Exceptional Connections

By engaging with the Virtual Avatars, students immerse themselves in multiple learning domains, including cognitive, social, emotional, and behavioral development. Teachers can select lessons tailored to each student's unique goals, interests, and areas of growth, fostering a truly personalized learning experience.



RoboKind Virtual Avatar Programs

Scalable

They provide a budget-friendly opportunity to extend impact across classrooms and schools throughout districts.

Accessible

With simplified equipment, quicker onboarding, and fewer logistical challenges, these programs are designed to be approachable and easy to navigate for all users.

Differentiated

The Virtual Avatars allow for simultaneous use and offer a diverse range of characters, meeting the varied needs, preferences, and goals of different students.

Impactful

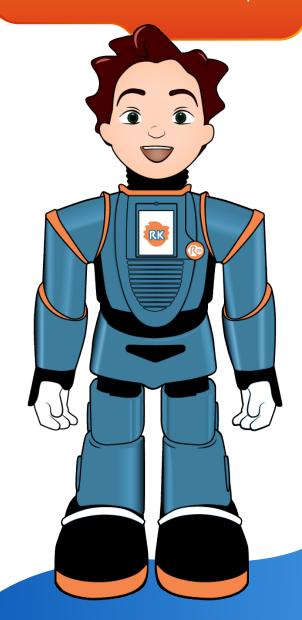
The programs incorporate opportunities for repetition to support skill development for students facing significant challenges, ensuring foundational skills that are crucial for success beyond the classroom.

Engaging

Students engage with I-VAKT's interactive, multisensory techniques, combining technology, visual, auditory, kinesthetic, and tactile activities to promote learning through play.

"Milo did improve her behavior and attitude"

Hope Epps Teacher Mobile County, AL



RoboKind Community

We are dedicated to empowering all teachers and education supporters to ignite engagement, foster learning, and make a lasting impact in their classrooms with the transformative RoboKind program.

What to expect each month

Weekly Prompts

Teachers will receive weekly prompts to respond to, fostering collaborative learning among peers.

Themed Newsletter

Stay informed with our monthly newsletter, featuring engaging themes, resources, and information on upcoming RoboKind features.

Live & Recorded Webinars

Participate in live webinars or catch up with recorded sessions at your convenience.

Interactive Q&A

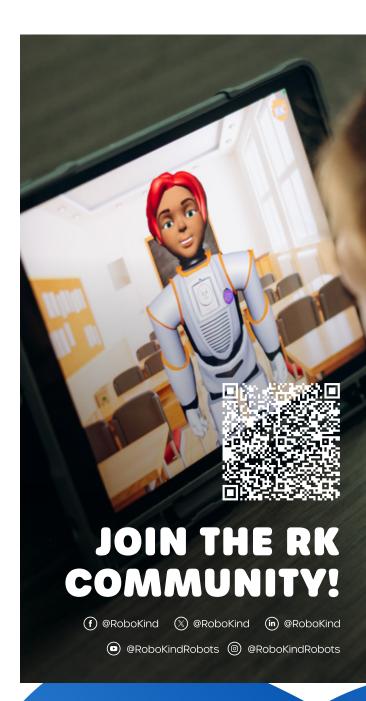
Access a platform to connect and collaborate with fellow teachers and the RoboKind Team.

Challenges & Rewards

Engage in exciting challenges with opportunities for rewards.

Prizes & Giveaways

Look forward to exclusive prizes and giveaways throughout the month!



Teacher Quotes after RoboKind Lessons

Upon completing RoboKind Lessons, teachers have the opportunity to enter post-lesson notes regarding student's progress.

"Showing his little smile. Starting to talk just a little. Really likes Milo."

Felecia Lively
Richland Parish School Board, LA

"Distracted and apprehensive at first but once in lesson, engaged and finished calmer"

Joyce ThompsonBeaufort County, SC

"He's so calm but I can tell he's happy about getting 100%. He really enjoys lessons."

Felecia Lively
Richland Parish School Board, LA

"Student was excited during this lesson and enjoyed it very much."

Mary Brayboy Florence 03, SC "Student was very excited to work with Milo and asked to do more lessons."

Mary Brayboy Florence School District 03, SC

ROBOKIND®

Outcomes Report | Fall 2024