

# **Indiana RoboKind Grant Opportunity**

As part of the Senator David C. Ford Educational Technology Program provided for in the <u>state budget</u>, the Indiana General Assembly has allocated \$1,350,000 for each fiscal year (2024 and 2025) "to provide grants to school corporations and charter schools to purchase robotic technology and provide professional development endorsed by the Council of Administrators of Special Education to improve the social and behavioral skills for students with autism." CASE currently endorses RoboKind, an educational technology company that produces assistive robots and corresponding curriculum, to serve these students.

RoboKind utilizes the Robots4Autism program, which is a three year research-based, clinically-tested curriculum that focuses on skills that, when deficient, often make it difficult for a student with Autism Spectrum Disorder (ASD) to fully participate in the general education environment successfully. Using facial-expressive robots, the program is based on a multidisciplinary developmental behavioral approach, leveraging speech-language pathology, occupational therapy, and applied behavioral analysis (ABA) principles. The curriculum is designed around function level rather than age and has been implemented successfully in various states for students between four and 21 years of age. The program includes software management to collect and track data (including student engagement) and mastery of lessons.

IDOE invites school corporations and charter schools to apply for an opportunity to obtain the RoboKind robotics technology, curriculum, associated training, and infrastructure support at no cost. To be eligible for this grant opportunity, applicants must:

- Have at least 10-12 students enrolled with a primary disability of ASD, and each student with ASD must have a communication goal within their Individualized Education Program (IEP);
- Be able to provide a safe, secure location to store the robot;
- Provide at least two classroom staff members per robot for program implementation, and identified staff must attend required professional development prior to implementation and allocate time for daily one-on-one instruction;
- Ensure communication between school corporation/charter school information technology (IT) staff and RoboKind professionals to share program requirements and set-up processes. RoboKind recommends initial program meetings for administrators to share information with parents and staff prior to implementation;
- Provide the names and contact information of the special education and IT directors to allow communication between the school corporation/charter school and RoboKind staff;
- Dedicate two tablets (iOS) to implement the curriculum; and
- Obtain Wi-Fi to support the curriculum.

## **Program Description**

RoboKind has worked with autism experts to develop a comprehensive curriculum that consists of more than 140 robot-delivered lessons, over 240 skills generalization lessons and activities, and hundreds of videos that model behavior and vocabulary symbols to support and reinforce important concepts and vocabulary. The robot's use of a slower rate of speech, combined with visual support, allows children with auditory processing deficits to engage more easily in each lesson. The lessons are delivered through a facially-expressive humanoid robot, RoboKind's model R25, which is approximately two feet tall and has a full range of humanistic facial expressions, speech, and movement. The R25 robots are available in light or dark skin tones, as well as male or female characters, to help represent the diversity of students using the Robots4Autism program. The Robots4Autism program, along with the R25 robot, was designed specifically to work with children across the autism spectrum. The Robots4Autism program incorporates an avatar or on-screen simulation of the model R25 robots to facilitate remote and blended learning environments. Additionally, the program provides parent resources to keep parents informed and provide them with information about the program and how to best support their children to create a holistically-supportive and informed structure for every student.

Robots4Autism includes a data reporting platform with graphical reports, providing teachers and administrators with objective, actionable data to evaluate the growth and progress of each student. Additional resources include IEP Goals Alignment examples, a matrix for aligning each student's IEP with specific modules, activities, and lessons within the Robots4Autism curriculum. These example IEP goals are sourced from the National Association of Special Education Teachers (NASET) and align with frequent goals for students on the autism spectrum and other similar needs.

RoboKind R25 robots repeat lessons with perfect consistency and as often as necessary for students to learn new concepts and to generalize these essential skills to real-life situations. The lessons teach and demonstrate self-regulation skills, conversational dynamics and protocols, emotional expression, and emotional recognition, as well as situational practice for a variety of social scenarios. Students then practice each lesson's targeted behavior, enabling them to gain confidence in generalizing to human interactions.

To view more information on the Robots4Autism curriculum program, please visit RoboKind.

#### Which students are best served by the curriculum?

The Robots4Autism curriculum was designed for school-aged children with ASD to facilitate reciprocal interaction, shared understanding, and emotions.

## What skills are needed?

At a minimum, students using the Robots4Autism curriculum should:

- Use consistent means (e.g., words, pictures, conventional gestures) to request information;
- Demonstrate the ability to understand spoken language and/or use picture symbols/icons (students do not need to be vocal);

- Mirror their instructor's actions:
- Make predictions about what is coming next in an interaction (e.g., engage in routines and turn-taking abilities);
- Comment on and respond to comments about pictures, objects, and events that are
  present (note that commenting is different from labeling without regard to a
  communication partner);
- Answer questions, particularly yes/no questions; and
- Have the fine motor abilities for direct selection on the tablet that permit the student to respond to queries as intended.

#### How can school corporations and charter schools know if students have these skills?

To confirm that the student has the prerequisite skills and to establish rapport/familiarity with the robot, the student may complete introductory lessons with the robot.

Completion of the introductory lessons and games will offer the facilitator additional information on whether the technology is suitable for the student. Before initiating the curriculum modules, the facilitator must be able to answer "yes" to the following questions, based on the introductory lessons:

- 1. Does the student relate positively to the robot?
- Does the student understand how to use the tablet to communicate with the robot?
- 3. Does the student understand how to answer yes/no questions using the tablet?
- 4. Does the student have adequate picture symbol recognition ability to be able to respond to queries accurately?

#### Student Requirements

- Students must have enough allotted minutes dedicated to specialized services in the areas of social communication, social-emotional, or social skills indicated in their IEP.
   The program requires two to three 20-minute sessions weekly.
- Each participating student must have goals written in the IEP for social skills instruction that fit within the Robots4Autism curriculum lesson plans.
- Students identified as qualifying via goals indicated in the IEP must be assessed for physical skills to manage the tablet in order to participate in the program. RoboKind provides a prerequisite document to guide this assessment.

## **Funding**

With the funding provided by legislation in the state budget, IDOE can provide a limited number of distributions during the 2024 and 2025 fiscal years. School corporations and charter schools selected to receive a grant will be required to purchase the technology and curriculum directly from RoboKind and then submit a reimbursement request to IDOE. Documentation of payment is required when submitting a reimbursement request.

# **Grant Application**

LEAs interested in Robots4Autism should complete <u>this Jotform application</u>, which must be reviewed by the special education director, IT director, and superintendent/head of school.

Funds are limited, but IDOE intends to support as many school corporations and charter schools as possible. Successful applicants will receive notification from IDOE by Monday, September 18.

# Important Dates & Grant Timeline

Date	Requirement
Friday, July 28	RoboKind Grant application opens
Friday, September 1	Grant application deadline
Monday, September 18	IDOE provides conditional approval
July 1, 2023 - June 30, 2024	Grant period
No later than 60 days after June 30, 2024	Grant reimbursement requests due

Please contact <a href="mailto:robokind@doe.in.gov">robokind@doe.in.gov</a> with questions.