



EarlyBird



SoapBox case study

EarlyBird Education

PreK-1 dyslexia screening powered by
the SoapBox voice engine

 SoapBox



About EarlyBird

EarlyBird's mission is to change the learning trajectory of children by adopting a proactive and preventative approach to identifying dyslexia, and other reading challenges, at the earliest stages in a student's reading journey. The platform is evidence-based and capitalizes on its solid research foundations to address the literacy milestones found to be predictive of reading success in young children.

At a glance

Company: **EarlyBird Education**

Product: **EarlyBird**

User group: **PreK – 1st Grade**

User count: **20,000+ students & 2,500+ teachers**

Website: **www.earlybirddedication.com**



Since the beginning of the 2021-22 school year, **EarlyBird is being used in more than 100 school districts across 20 states in pre-K through first grade classes**. The company has plans to expand its offerings to include second and third graders in the short-to-medium term.

Recognizing that educators lacked easy-to-administer, evidence-based tools for early identification of dyslexia risk in children, **Dr. Nadine Gaab** (Associate Professor at Harvard Graduate School of Education) spearheaded the development of EarlyBird's platform at the Innovation and Digital Health Accelerator (IDHA) at Boston Children's Hospital.

EarlyBird co-founders include **Dr. Yaacov Petscher** from the Florida Center for Reading Research, and **Carla Small**, formerly Executive Director of IDHA and now EarlyBird CEO.

The product

EarlyBird is a fun and engaging game that predicts a student's risk for dyslexia and other reading challenges at the earliest stages, when the window for intervention is most effective.

In the game, the child's feathery friend Pip guides them along a path through the city, meeting animal friends who introduce the child to each subtest. The complete assessment takes 20 – 45 minutes depending on the child's grade level and benchmarking period, and consists of a variety of subtests, including oral subtests that capture and score student responses. At the end of each 2- to 5-minute subtest, the child earns a virtual prize.

The oral subtests in the EarlyBird game are powered by speech recognition technology from SoapBox Labs, the leading speech tech company for kids. SoapBox's technology generates accurate and automated scoring of student responses, surfacing the data on teacher dashboards in almost real time.



EarlyBird's gamified assessment is self-administered in small groups and overseen by a caretaker or teacher who needs no specialized training. The test is adaptive, and thanks to SoapBox's speech technology, **scoring is largely automated.**

The challenge

Most “pencil and paper” diagnostic assessments identify a child’s decoding skills but fail to identify oral language skills. Based on word recognition only, the results of these assessments offer teachers limited insights about a child’s risk for dyslexia or other reading challenges.

EarlyBird’s founders knew that proficient reading requires both word recognition and language comprehension and **decided to integrate speech technology into the platform to accommodate oral responses** and ensure that teachers could easily identify where children were having, or were at risk of having, reading challenges.



Integrating SoapBox

The SoapBox voice engine works off-the-shelf, no custom coding needed, for a wide range of use cases including phonological awareness, phonics, pronunciation assessment, keyword spotting, words, phrases, and short sentences.

With our off-the-shelf voice engine, EarlyBird assesses students on all the critical skills foundational to reading, including: phonemic/phonological awareness, phonics, oral language comprehension, and naming speed (RAN).

Here's how our voice engine integrates seamlessly into the EarlyBird experience: As a student moves along the gameboard, a robot holds out a microphone prompting them to speak. The SoapBox voice engine captures, analyzes, and automatically scores the student's audio responses, which EarlyBird compiles into individualized student instructional profiles that, in near-real time, populate the teacher dashboard.

Why EarlyBird chose SoapBox

EarlyBird chose SoapBox over other speech engines because of our expertise when it comes to **voice-enabling solutions for young children at the earliest stages of the literacy journey**. The SoapBox engine is fit for purpose, quick to test, and easy to scale. Both companies also share a commitment to developing innovative edtech tools that are grounded in science and embrace evidence-based practices.

SoapBox supported EarlyBird through all stages of product development, testing, and launch of their platform with technology, UX, and product expertise. From the start, **EarlyBird was impressed with the accuracy of SoapBox's engine, which could capture the unique speech patterns of diverse early learner voices**. Our focus on delivering a bias-free experience for every voice — regardless of race, background, accent, or ethnicity — was critical to EarlyBird and supports them in advancing culturally responsive practices in instruction and assessment.



High accuracy
for kids' voices



Equity
at the center of
design



Actionable data
on students'
pronunciation &
reading gaps

The benefits of speech tech for EarlyBird

Integrating SoapBox's speech technology into the oral reading assessments of their gamified platform has allowed EarlyBird to:

- Help teachers to intervene early when intervention is most effective
- Save teachers time by automatically assessing, scoring, and compiling data on students' oral reading skills
- Create actionable data on reading gaps and challenges to support more proactive, data-driven instruction
- Give teachers ownership over assessments that are completed in the classroom, without the need for additional or specialist resources
- Hold teachers accountable for improving students' reading outcomes
- Mitigate the risk of racial bias
- Eliminate the subjectivity of traditional teacher-led reading tests

We were looking for a partner equally committed to evidence-based product development and knew we could count on SoapBox Labs' integrity of product, roots in science, and equity-focused design to accurately represent children's voices of all accents and dialects.

Carla Small, CEO & Co-Founder, EarlyBird



Get in touch

Looking to voice-enable your education solution for kids? We'd love to hear about your use case!

Visit our **Get Started** page to sign up for your free demo, or email us at hello@soapboxlabs.com.