

indi

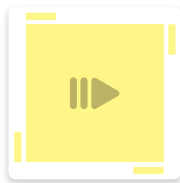
Special Education Guide for Educators

What is Sphero indi?

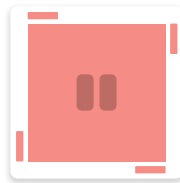
indi is the most approachable entry-level learning robot. Driven by color, indi inspires imaginative, play-based learning by empowering kids to develop computational thinking skills and learn the basics of coding and problem solving.



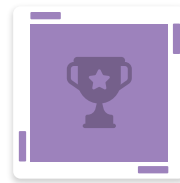
Go, go faster!



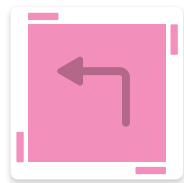
Slow down



Stop



Celebrate!



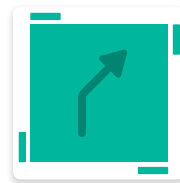
Turn 90° left



Turn 90° right



Turn 45° left



Turn 45° right

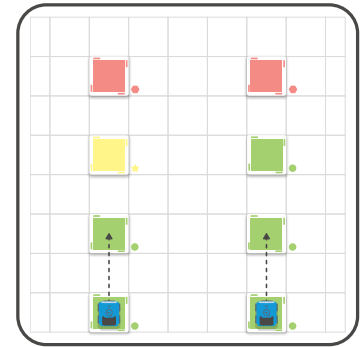
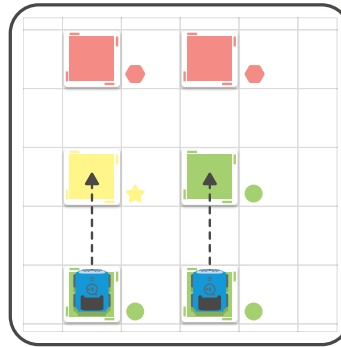
What makes indi great for special education?

- indi is cute and exciting!
- Scalable, customizable activities and challenges
- Practice STEAM and computational thinking with no screens required
- indi's predictability reduces frustration and maximizes engagement
- Supports language development
- Accessible to learners with visual and auditory impairments
- Helps develop fine motor skills
- High-value reinforcement
- Supports collaboration with peers
- Builds student confidence

Easily Accommodated Challenge Cards



Certain **Challenge Cards** provide students with **two choices** so students can practice solving the puzzles themselves before finding the answer on their own.



Challenge Cards can be **easily replicated** to **add accommodations** for students to set them up to use non-accommodated Challenge Cards independently.

- Add **customized multiple choice** options on all challenge cards.
- **Create your own choices** to present to students depending on how much assistance you think they might need.
- As students develop skills, teachers can **adapt the accommodations provided** (start with a field of two, move to a field of three, then a field of four) in hopes that eventually students will not need the scaffolding.

Easily create your own Challenge Cards for your students with our [DIY Challenge Card Template](#).



Screenless Learning with Visual Supports



Students who are struggling with decoding can still access indi, as it **doesn't require students to be able to read** to engage with it.

Students on **any reading level** can engage with indi since indi relies more heavily on **visuals** than text.



indi is great for an **Integrated Co-Teaching (ICT) classroom**, or any classroom with students with a wide range of academic skills.

- indi is great for students who are **learning to read** and can have **accommodations** added to make it more accessible to students (as mentioned earlier).

indi is also great for students who need an **extra challenge**, since students can take it a step further using the **Sphero Edu Jr app** to change the configurations of the color tiles, etc.

- This highlights the **adaptability** of the product and how it can be used with students who are just developing their skills to students who need extra challenge.



Considerations for Students Diagnosed with Autism Spectrum Disorder and/or Multiple/Severe Disabilities



High Levels of Predictability / Expected Behavior

- Because we know that unexpected events are particularly challenging for students with ASD and can lead to frustration, **predictability** is a big consideration when working with students diagnosed with ASD in terms of **increasing confidence and reducing frustration**.
- **indi always reacts the same to colors** (unless students reprogram in the Sphero Edu Jr App) so students can **learn** what each color tile means, and then can **expect the outcome** when indi drives over the color tile.



Language Development

- indi uses **cause-and-effect**, making it a great tool to use with students to develop language, especially **Core Word language development**.
- **Core Words** are words that **make up the majority of everything that we say**, and can be used in a variety of ways in language. They make up approximately 80% of what we say on a daily basis.
- indi can be a **fun and engaging tool** to use with students to develop many important language skills, and **directly target basic linguistic concepts** as well. Some examples indi targets are: colors, temporal cues, and positional cues. It can also be used to indirectly target linguistic concepts like negation and emotion.





AAC (Alternative and Augmentative Communication)

- indi can be a great tool to get students motivated to **use and learn new words** using **AAC** or an **AAC device**.
- Typically, AAC devices are comprised primarily of core words. **Some ideas of words that can be targeted / utilized while using indi are:**
 - Go, stop, more, turn, fast, slow, make, it, play, come, finished / all done, on, big, small.
- indi can be a really fun and engaging tool for students to **dictate actions** with a clinician or teacher using the student's preferred method of communication (whether it's a high-tech device, or a low-tech form of AAC, or verbal speech, etc.)
- **Examples using core words** (core words are demonstrated in capital letters):
 - **MAKE IT GO**
 - **Ready, set, GO**
 - **GO SLOW**
 - **GO FAST**
 - **WANT SMALL / BIG TURN**
 - **PUT ON (color tile)**
 - **I WANT MORE**
 - **PLAY MORE**



Concrete & Structured

- Students with ASD often struggle with abstract concepts, **indi is concrete** in that (unless programmed differently) the **color tiles create a reaction**, and the reaction to the color **always stays the same**.
- The concrete rules of "red means stop" "green means go" "yellow means slow down" "purple means celebration," etc. allows for students to learn the rules more readily and **engage with the material without frustration**.
- **Challenge cards** provide a **structured activity** to engage students.





Accessible to Students with Fine Motor Deficits

- Doesn't require the use of a keyboard, iPad, laptop, etc. to program.
- The **color tiles** are large and **easy to move around and manipulate**.
- The color tiles included with the indi Class Pack and Student Kit are **rubber** which make them easier for student to **pick up and move**.
- indi **fits perfectly in the palm of your hand** and does not require the use of any advance finger grasps to hold.



High Levels of Reinforcement

- No matter which color you put down, when indi rolls over it, it's going to react in some way, **providing students with immediate reinforcement**.
- Creates a **clear contingency** for students: **color = movement / change**
- **No delay in reinforcement** because of the quick reaction from the color sensors.
- There is a **quick reinforcement** when indi rolls over the tile with the sound effects.



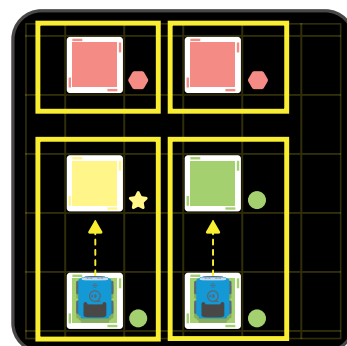


Accessible to Students with Visual Impairments

- indi has a built-in speaker, and it **makes a noise every time it rolls over a color tile**, allowing students with visual impairments to know the actions indi is taking.
- Color tiles can easily have a **braille label** added so that students with visual impairments who use braille can decipher between colors.



- We have a **customizable template** that allows educators to make their own Challenge Cards. Teachers can use this template to make **high-contrast challenge cards**.
 - Consider making a black background and adding a yellow outline around any text, shapes, and the grid.



indi™

Activity Resources

Challenge Cards

Young learners can work independently or in groups through self-guided learning with the 15 included Challenge Cards.

Included with the indi Student Kit & the indi Class Pack



Educator Guidebook

indi **seamlessly integrates** computational thinking and coding concepts into the **curriculum you are already teaching** with the in-depth Educator Guide Book. This book includes carefully-designed, standards-aligned **lesson plans** for: Directions, Patterns & Sequences, Measuring, Storytelling, and More.

Included in the indi Class Pack

Sphero Edu Jr App

In the Sphero Edu Jr app students can control how indi reacts to the world through intuitive yet powerful programming blocks. Reprogram how indi responds to different colors by choosing from a variety of movements, lights, and sounds that appear when you navigate over the associated color tile. **Students do not need to know how to read to use the Sphero Edu Jr app.*

[Free App Download](#)

