Educators learn, students learn
Rather than be experts themselves, educators learn to code alongside students while fostering healthy class culture and modeling growth mindsets.

Bring coding into content classrooms
CSF enhances core content areas by enabling non-computer science teachers to make curricular connections and explore computer science with their students, from foreign language to science to PE.

Elevate community through SEL
CSF allows learners to grow vital social and emotional learning skills (SEL) as well as 21st century skills, such as creativity, collaboration, critical thinking, communication, and responsible decision-making.

All ages, all abilities
Whether a 3rd grader brand-new to coding or a high school senior who’s a seasoned programmer, CSF is an entry point into problem-solving through programming.

Device compatibility
CSF is designed around the pair-programming technique, where two students share one device and one Sphero robot. The program’s compatibility across devices allows ease of implementation, accommodating any device restriction.

Standards-aligned
CSF is built on the K12 Computer Science Framework Principles and is aligned to the Computer Science Teachers Association (CSTA) standards.

Sphero Edu provides a toolset that is unbounded in its potential. Our program goes beyond code by incorporating robotics and technology with collaborative STEAM activities, nurturing students’ imaginations in ways no other education program can.

Ask your Sphero Edu sales rep for a sample lesson
Suitable for your school’s needs

Supports your level of readiness

Perhaps your school desires an entry point for coding and robotics. Or, maybe you have some experience and would like to grow. Or, perhaps you need a creative approach to fostering community. Whatever your unique situation, Sphero CSF can meet you where you are.

Flexible implementation
- School-wide initiatives (STEAM, Computer Science Education, Technology and Robotics)
- Single teacher or team-taught
- Subject-area teams or grade-level teams
- Extracurricular or core content

Flexible device support
- Shared devices (classroom cart)
- 1:1—a device for every student
- BYOD
- Stationary devices in Library Media Center or Learning Lab

Flexible timing
- Weekly in the classroom or monthly in the Library Media Center/Makerspace
- Short “sprints” with a given theme or a year-long marathon
- Build deeper skills or broaden application

Ready to roll (out)

YEAR 1
- Purchase CSF
- Buy a Power Pack to put in your library or makerspace
- Buy your most enthusiastic tech educators a Power Pack to pilot CSF in their classroom
- Enroll an educator in Sphero Fundamentals to get familiar with the Sphero Edu platform

YEAR 2
- Renew CSF from last year
- Add a Power Pack to share between three STEM educators in the same building and a copy of CSF for each to use
- Buy additional copies of CSF for educators to gradually incorporate activities with the guidance of year-one educators
- Enroll a cadre of first-time Sphero educators in Sphero Fundamentals, and buy a Power Pack for them to share

YEAR 3
- Renew CSF from last year
- Buy additional copies of CSF and another Power Pack to rotate between last year’s cadre of Sphero educators
- Expand to an entire grade level, with additional sets of CSF and Power Packs
- Enroll in a Sphero Virtual Training session for the whole school

Contact your Sphero Edu sales rep to tailor a roll-out that meets your needs

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Make CS and robots approachable in all content areas

Scaffolded across three courses and 72 lessons, teachers and students build Draw, Block, and Text coding skills. They then integrate these concepts into curricular content: everything from polygons and poetry to logic-puzzlers and compliment-givers.

### 9 Content Themes

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<th>COURSE 1</th>
<th>COURSE 2</th>
<th>COURSE 3</th>
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### 6 Programming Levels

- **DRAW**
  - Manual Movement, Distance, Direction, Speed, and Color

- **BEGINNING BLOCK**
  - Roll, Delay, Sound, Speak, and Main LED

- **INTERMEDIATE BLOCK**
  - Simple Controls (Loops), Sensors, and Comments

- **ADVANCED BLOCK**
  - Functions, Variables, Complex Controls (If Then), and Comparators

- **BLOCK-TEXT TRANSITION**
  - JavaScript Syntax, Punctuation, and Asynchronous Programming

- **BEGINNING TEXT**
  - JavaScript Movements, Lights, and Sounds

### 72 Total Lessons

Ask your Sphero Edu sales rep for a sample lesson
“This year in my third grade class, I’ll teach one lesson a week with our shared iPad cart and Power Pack. We can progress through a theme to take on new challenges, but when I sense students need more practice, we will use a different theme to review and master coding concepts.”

Skip around content themes and programming levels
An individual educator chooses a theme to start the class. Students can build conceptually by continuing lessons in that theme or reinforce their practice of a given concept by exploring in a different theme.
Middle School Educator

“I look forward to working alongside my colleagues as we tag-team three themes with our students. Across the semester, we will teach collaboratively and—as it suits our content—grow not only our coding abilities, but also our culture as a team.”

A grade-level team covers a different theme in each class

Students work through a given theme with a content-area teacher, with each teacher devoting a portion of their year to incorporating coding in their content area. Teachers learn programming alongside their students, and together apply their new knowledge to enhance their own curriculum.
“In our Library Media Center/Makerspace, grades 6, 7, and 8 schedule quarterly visits to work on engineering-related challenges. Students bring their own devices, and I can easily pull out two Power Packs and assign a lesson for students to tackle. We cover all three courses amongst the grades.”

Different grades follow various themes and programming levels

Grade-level students can journey through the supplemental curriculum over the course of multiple years, progressing across the themes and deepening understanding. Newer students can visit previous lessons, while students who need a challenge can choose more advanced concepts.