CS First from Anywhere

Distance Learning Guide

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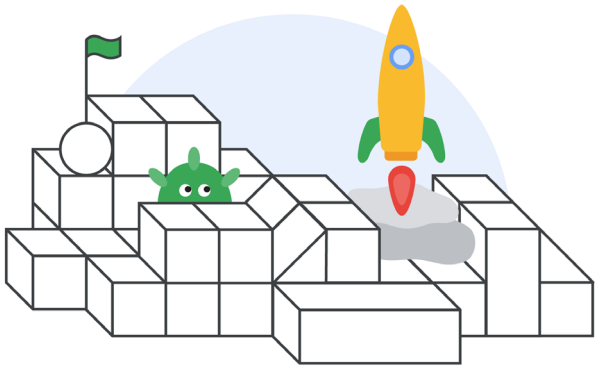


CS First is a free, easy-to-use computer science (CS) curriculum designed for 4th to 8th grade students. The curriculum has everything you need to get started in any learning environment, from lesson plans to solution sheets and example projects. We've collected tips from teachers like you on how they've used CS First in distance and hybrid learning environments. Try some of these tips and suggest your own in our Help Forum.

Getting Started with CS First

If you're new to CS First, start by creating a teacher account. For detailed instructions on getting started, check out our Get Started Guide or watch our Getting Started videos. You can pair this guide with activity-specific lesson plans in the "Materials" section of each CS First activity overview page.

CS First from Anywhere

Here are some teacher-tested tips to help you and your students succeed in any learning environment.

- **Review the activity from a student perspective before assigning it to your class.** Matt Mangold, a teacher in London, Ontario, shares "Go through the activity as a student so you have a better understanding of what your class will experience. I used Screencastify to record the steps for logging in and getting started as a student, and shared that as instructions for my class."

- **Record a video or write a brief introduction** to communicate your expectations and to help students start the lesson successfully.

- **Pre-generate and distribute student usernames and passwords** using the class code instead of having each student create a CS First account on their own.

- **Print a class roster or create your own** to track which username and password belongs to which student. To protect student privacy, CS First does not store student names on the website.

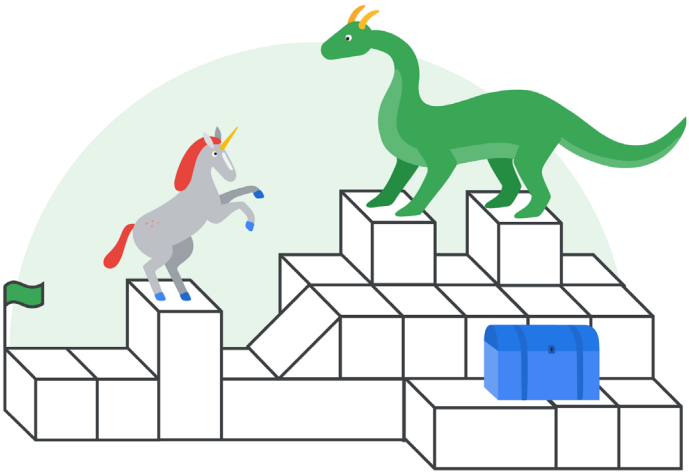
"Go through the activity as a student so you have a better understanding of what your class will experience. I used Screencastify to record the steps for logging in and getting started as a student, and shared that as instructions for my class."

Matt Mangold,
teacher, London, Ontario

Supporting Students in Low-bandwidth Environments

Internet access is preferable for streaming videos, but if your students' homes have low connectivity, don't worry! Here are some ways to help students get started with CS First even if they have low connectivity.

- **Download the videos.** Have students download the CS First videos to their devices by clicking the three-dot menu in the bottom right corner of each video, or as a zip file from the activity Materials tab. If you're on a hybrid schedule, students can download the videos to their devices at school before they head home.
- **Download the offline Scratch editor.** Students can use the free Scratch app so they can follow the video instructions even when offline.
- **Use video transcripts.** For students without video access, you can copy and paste the video transcript (click "Transcript" under each video) into a document that's accessible offline. You can also paste the video transcript into Google Translate to support learning in multiple languages.
- **Connect with students before they start.** While students can work through CS First activities at their own pace, it's a good idea to check in with them on their progress. You can engage with them in real time or connect asynchronously.



Managing Asynchronous Instruction

In hybrid or distance learning environments, communication and feedback will help your students run through CS First lessons smoothly. Here are some tips that support students in an asynchronous learning environment.

- **Follow students' progress.** Track the percentage of the activity each student has completed in your class' progress summary on your teacher dashboard. Reach out to students who might need more support.
- **Encourage peer feedback.** When students complete a project, have them exchange project links with a partner for peer feedback. Have them ask questions that inspire reflection, such as "Which sprites did your project use and what did you have them do?" and "What types of code blocks did you use and why did you choose them?"
- **Foster mentorship.** Some of your students might get the hang of coding right away. Consider having those students serve as peer helpers to answer questions and help other classmates "debug" their projects.
- **Share "projects of the week."** Choose a student project to share via email or in a presentation so your class can view a variety of completed projects. Gordon Brune, a CS teacher from Larchmont, New York, had his students review and comment on at least three classmates' projects to build a classroom connection while they were learning at home.
- **Allow time for reflection.** After students finish their projects, have them write a short reflection. Provide students with questions to answer, such as "Why did you use certain blocks?" or "What was your favorite part of the project and why?"

> "I make sure students can see each other's projects. I have them look at at least three other projects and comment on them to build a feeling of classroom connection."
>
> Gordon Brune,
> teacher, Larchmont, New York

Choosing Starter Activities

Not sure which lesson to teach? See our activity recommendations below or **answer a few questions on our site** to get a recommendation for activities that meet your class' needs.

For full-time distance learning classes, we recommend one-hour lessons that supplement or reinforce core subject concepts. These lessons are aligned to Common Core ELA Anchor Standards and include the following topics:

Characterization

Introductory I 1 hour I ¡Disponible en español!

Use code to describe a character's actions, thoughts, and words.

Dialogue

Introductory I 1 hour I ¡Disponible en español!

Code a conversation between two characters to explore the role of dialogue in storytelling.

Figurative Language

Intermediate I 1 hour I ¡Disponible en español!

Explore figurative language with an emphasis on metaphors, similes, personification, hyperbole, and idioms.

For classes on a hybrid learning schedule, we recommend our multi-day lessons, with activity themes aligned to student passions. They include:

Fashion & Design

Intermediate I 8–12 hours

Build fashion-themed programs including a fashion walk, a stylist tool, and a pattern maker.

Game Design

Advanced I 8–12 hours

Learn basic video game coding concepts by making different types of games.

Storytelling

Introductory I 8–12 hours

Use code to tell fun and interactive stories.

Looking for more options? Check out these popular one-hour activities that are fun for anyone, anytime!

Animate a Name

Introductory I 1–2 hours I ¡Disponible en español!

Choose a word or name or word and bring the letters to life with animation, sound, and music.

Code Your Hero

Introductory I 1–2 hours I ¡Disponible en español!

Choose an everyday hero from your own life and build a story or game using code to give your hero superpowers.

Create your own Google Logo

Introductory I 1–2 hours

Bring the Google logo to life using code, utilizing programming and design.

Ready to start coding?
Head to g.co/csfirst.

Have questions or want to connect with other educators who are using CS First for distance or hybrid learning? Check out the CS First Help Community.

Want to join the conversation?
Use #CSFirst on Twitter.

Want to review CS First distance learning tips? Watch this video for the highlights.

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