



HOOR OF CODE

COMPUTER SCIENCE EDUCATION WEEK IS DEC. 3-9, 2018

Each year, classrooms around the world celebrate computer science education week during the first week of December by taking an hour out of their week and learning some programming. While the words “computer science” and “programming” may strike fear into the hearts of many teachers, there is really nothing to worry about when it comes to the Hour of Code. All it takes is your excitement and willingness to participate and encourage your students!

There are many ways to participate in an Hour of Code. Several websites have programming lessons set up specifically for the Hour of Code as well as for extensions past just one hour. There are also iPad apps that are designed for students to learn the principles and logic of coding while not having to type any actual code. All of these are teacher-friendly and provide tutorials for students and teachers throughout the lesson.

Websites:

Hour of Code.com/Code.org:

You can register your classes for both Hour of Code and other sessions by going to <https://www.code.org> and following these directions: https://youtu.be/smeIV_KISE.

Code.org has lessons designed for all ages, from kindergarten through adult. Their lessons work on just about any device, and they even have lessons that don't require any devices!

KhanAcademy.org:

Khan Academy is a great website for more than just computer science – there are videos teaching math, science, history, economics, and more! There is a specific set of lessons set up for an Hour of Code (at a few different levels), but they also have some general lessons about coding that could serve as an extended lesson. Similarly to code.org, you can sign up as a teacher and create your

classes that way. Follow these directions to help you get started: <http://bit.ly/2odT9W9>

Scratch:

Scratch is a creation of MIT that is a mix of programming and animating. Students can use pre-designed blocks of code or define their own to make their animations come to life. There are tutorials for all ages, and they also provide “activity cards” to inspire students to try new things in their designs.

iPad Apps:

Box Island:

Box Island is an app designed for elementary students to help them think about the logic of coding without having to “write” code. Students put a variety of commands in order to help a box navigate around an island, then run their program to see whether they were successful.

Hopscotch:

Hopscotch is similar to Box Island in that it is pseudocode, but it is much more open-ended in its goals. Students are free to make their characters do whatever they please (move, shake, bounce, etc.) and can turn repeated actions into functions. Hopscotch also provides [several guided lessons](#) to help teachers show students how to start.

iPad/Website Combination:

Tynker:

Tynker works on both an iPad and in a browser, although somewhat differently in both cases. The iPad app is similar to Box Island. The browser version lets students code in a method of their choice. They can use pseudocode or a variety of real programming languages such as JavaScript or Python to write their programs.

Find more E-tips at <https://goo.gl/qPn7bN>.