

CCS Family Math Night
Engineering & Design Thinking: Exploring Computer Programming for Children
By Laurie Walsh, RSU #13 Technology Integrator

Learning to write code does not have to be dry and dull. There are many tools for children that allow them to experience the problem solving and conditional reasoning that programmers use without getting bogged down in a programming language. Try some of these at home on your mobile device or computer.

Websites and APPs that Encourage Children to try Coding

<https://code.org> **CODE.org** is a nonprofit designed to allow people of all ages to try coding. We use it for our Hour of Code presentations in December, but there is plenty of content for students to explore on their own. It can be used with all grade levels. **Free**

<https://www.tynker.com> **Tynker** is a web or App based program to allow children to explore programming in its simplest block based form. It is suitable for children 7 and older. **Paid Subscription**

<https://scratch.mit.edu> **Scratch and Scratch Junior** were created by MIT to allow children to experience computer program in a block based system. There is a great deal of freedom in creating and programming sprites. Projects range from game-like creations to musical instruments, to storytelling. Scratch is suitable for children 8-16, and Scratch Jr. for slightly younger students. **Free**

<https://www.kodable.com> **Kodable** is appropriate for ages 4-8, but even adults who are afraid of the more complex programming apps enjoy the simple format and many levels of Kodable. It can be used as an app or on the website, **Free and Paid subscriptions**

How to Find Your Own

Use websites that rate apps and websites to get the scoop on what apps are best for what age level. One that is great is Common Sense Media

<http://www.common Sense Media.org/app-reviews> - Here you can search for apps by age level and topic, as well as by device. You can also Google “best math apps” or “interactive addition”, etc. You’ll find more!!

For help or to share your reactions please email me, Laurie Walsh at lwalsh@rsu13.org . I am the technology integrator for the elementary schools and would love to hear from you.