Coding Resources

CoderDojo - https://coderdojo.com/

The CoderDojo movement believes that an understanding of programming languages is increasingly important in the modern world, that it's both better and easier to learn these skills early, and that nobody should be denied the opportunity to do so.
To that end, we've built a global network of free, volunteer-led, community-based programming clubs for young people.

CoderZ - http://www.intelitek.com/coderz/coderz-curriculum-coding-robots/

The CoderZ learning environment is an engaging and effective way to teach and learn STEM with robots. CoderZ's ***Coding Robots*** course offer students the opportunity to experiment with robots and understand how STEM concepts affect everything we do and enables us to do more. CoderZ helps get teachers started with robotics and bring the interdisciplinary value of STEM into the classroom.

CodeMonkey - https://www.playcodemonkey.com/

From the very first moment in CodeMonkey, students start to write code in a real-world programming language called CoffeeScript. CoffeeScript is a modern open-source programming language that compiles to JavaScript, and similarly to JavaScript it is used in the industry primarily for web applications. Through the CodeMonkey program students will learn advanced Computer Science concepts such as loops, variables, functions, conditions and more. With Scratch, you can program your own interactive stories, games, and animations — and share your creations with others in the online community.

Common Sense Media - https://www.commonsensemedia.org/

Common Sense's research explores kids' relationship to the news and how adults can help kids thrive as 21st-century citizens.

Computing, via the Khan Academy - https://www.khanacademy.org/computing

Girls Who Code - https://girlswhocode.com/

Girls Who Code has gone from 20 girls in New York to 10,000 girls in 42 states. That's the same number of girls who graduate each year with a degree in computer science. That's progress! I'm proud to say we're not just aiming to close the gender gap in tech — we're actually doing it.

Hour of Code - https://code.org/

Code.org® is a non-profit dedicated to expanding access to computer science, and increasing participation by women and underrepresented minorities. Our vision is that every student in every school should have the opportunity to learn computer science, just like biology, chemistry or algebra. Code.org organizes the annual Hour of Code campaign which has engaged 10% of all

students in the world, and provides the leading curriculum for K-12 computer science in the largest school districts in the United States.

Computer Science Education Week – December 4 – 10, 2017

kidOyo - http://www.kidoyo.com/

kidOYO® produces educational infrastructure in use by leading K-12 classrooms in order to deliver personalized project-based learning outcomes in the areas of computer science, engineering, and entrepreneurship education. Additionally, kidOYO® works with universities to expand opportunities for students and staff to build collaborative relationships with families, corporate employers, and administrators in K-12 schools and local communities, and leverages these partnerships to produce live events of increasing importance to community participants. The unique methods developed by kidOYO® leaders are being deployed exclusively via the web-based learning platform established at OYOclass.com

Made with Code - https://www.madewithcode.com/

We started Made with Code because increasingly more aspects in our lives are powered by technology, yet women aren't represented in the roles that make technology happen.
If we can inspire teen girls to see that code can help them pursue their passions, whatever they may be, than hopefully they will begin to contribute their voices to the field of technology for the benefit of us all.

Makewonder - https://www.makewonder.com/

We build coding languages uniquely designed for kids ages 6 and up, putting the power of play into their hands. Dreaming up new adventures and bringing them to life, kids master this language by transforming our characters and robots into ready-to-play pals with code. With Wonder Workshop and our Dash and Dot Robots, every kid has the building blocks to push the boundaries of what is possible.

Project Lead the Way - https://www.pltw.org/

Project Lead The Way provides transformative learning experiences for K-12 students and teachers across the U.S. They create an engaging, hands-on classroom environment and empower students to develop in-demand knowledge and skills they need to thrive. They also provide teachers with the training, resources, and support they need to engage students in real-world learning.

Robots4Stem – https://quadrant4edu.com/robots4stem/

ROBOTS4STEM classroom projects vary by complexity and let students of all ages bring Jett to life on their computers, using scripts and programs that cover a range of ability levels.
Every student is provided with a personal Jett avatar—an emulator that is modeled after the real robot. Programs that the students write using their personal avatar also operate on the

classroom's real, working Jett robot. With ROBOTS4STEM, every student interacts with a working robot and learns how to direct, control, and program an intelligent machine. This flips students' roles and engages them as guardians, instructors, and programmers of a dynamic, electronic robot that can be personalized.

Scratch - https://scratch.mit.edu/

With Scratch, you can program your own interactive stories, games, and animations — and share your creations with others in the online community.
Scratch helps young people learn to think creatively, reason systematically, and work collaboratively — essential skills for life in the 21st century.
Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab. It is provided free of charge.

StudioWeb - http://www.studioweb.com/

The original concept for StudioWeb came about in 2010 and was influenced by the new trends of the day, specifically: the gamification of the online learning experience and the flipped classroom model. StudioWeb courses were created by experienced educators and web professionals. The updated curriculum is specifically designed with consideration to student and teacher feedback. StudioWeb's scoring, tracking and classroom automation makes managing even a large classroom much easier.

TI Codes – https://education.ti.com/en/activities/ti-codes/innovator

10 Minutes of Code for the TI-Innovator™ Hub - Introduce students to the basics of coding and build their understanding of math concepts, programming logic and coding skills using TI-84 Plus CE or TI-Nspire™ CX technology to control the TI-Innovator™ Hub.

MicroSoft **Touch Develop** - https://www.touchdevelop.com/

TouchDevelop[1] is an interactive development environment and a visual programming language being developed at Microsoft Research. TouchDevelop is used to develop application programs for mobile devices, including smartphones and tablet computers. It can also be used on any computer which has a suitable web browser. In addition to its use as a tool for creating application programs, TouchDevelop has been used to teach programming and mobile device technology at schools, colleges and universities.[2]

Tynker - https://www.tynker.com/

Tynker empowers kids to become Makers. Kids acquire crucial 21st century skills and learn to innovate across multiple themes based on their interests.

VidCode - http://www.vidcode.io/

VidCode is the most engaging coding curriculum for tweens and teens. VidCode teaches teens to code by empowering them to create the things they enjoy in their daily lives with code, including video filters and memes. VidCode is partnered with NYC schools, Facebook VR Education and Snapchat to reach teens all over the world. It reviews fundamentals of design and teaches the language designers use. Working in pairs and group critiques are encouraged during this class. VidCode will be used as a canvas to apply creative solutions to design challenges. Students will learn the language of visual design and JavaScript. It is the combination of art, photography, video and code. It comes with easy to use curriculum ready to go.