



Presented by:

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iCanCode's Story

Technology is here to stay!

“productive screen time”

“not only consume technology but build it”

“don't play computer games, create your own”

“build your own website about your favorite subject/s”

Who We Are

www.icancodeclub.com

➤ iCanCode

- After school Academic Enrichment Program
- Dedicated instruction in Computer Science and Programming
- School age students in grades 1-8

➤ Our students use the aspects of programming to

- Learn and practice problem solving skills
- Develop logical thinking
- Learn programming language skills
- Show off their creativity through
 - *Creation of games using animations*
 - *Developing websites about themes they identify*

Our Mission

- Our mission is to jump start lower grade school kids computer literacy (Grades 1-8)
- Address the gap and shortfalls within STEM education while providing a fun and safe digital learning environment.

Our Objectives

To afford school age children grades 1-8 in Rochester NY ; a segment that is not formally targeted by STEM education system ,the opportunity to do the following:

- **Expose students at an early age to computer science principles, concepts, skills, and programming to develop problem solving and logical thinking skills.**
- **Succeed in this digital age irrespective of each student's present and future endeavors given that code is the soul of every electronic device that our kids interact with.**
- **Understand how Computer Science impacts the community they live in, encourage responsible digital citizenship and build a solid digital footprint.**
- **Understand ethical and social challenges, risks and impacts of computer usage**
 - The inappropriate use of web and mobile technologies
 - The inappropriate use of social networking, cyber bullying, cybercrime, and copy rights around internet content.

Goals that we believe are closely aligned with the economic development of our local community and future job market needs

Filling the Void

- While computer use in schools is increasing, knowledge about computing is not keeping pace.
- Computer Science is rarely taught at all in elementary and middle school.
- All aspects of school age student's lives are increasingly governed by computing technology as they are in touch with it at all times; at school, at home, in the community and in their social relationships.
- STEM education has fallen woefully behind in preparing lower and middle school students for a world in which computing is highly pervasive and lies at the heart of our economy and their daily life.

In September 2014, the UK became the first country in the world to overhaul the way it teaches computing to the country's children by adding mandatory programming classes. The old system emphasized word processing and spreadsheets. The new system is aimed at preventing the young from turning into zombies in front of screens. Five-year-olds will play abstract games and complete puzzles to familiarize themselves with the concept of algorithms without the complexity. By the time they hit 14, teachers will guide them on how to use two or more programming languages. All of this is compulsory.

Outlook

Challenge: Facing a tech-talent crunch

- According to the Bureau of Labor and Statistics (BLS), through 2020 there will be 9.2 million jobs in the areas of STEM.
- Of those jobs, more than half (4.6 million) will be in computing, compared to 2.8 million in engineering and 0.6 million in the life sciences.
- Computing will be one of the top ten fastest growing job areas, with more than 150,000 new jobs opening every year, representing 22% job growth rate.
- Also, as those statistics make clear, the long term economic well-being of the US depends on computing, which in turn depends not only on a robust computing workforce, but also on a robust computing savvy next generations.

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Our Program Offerings

Academic Center:

located at 1425 Jefferson Road in Rochester

➤ **Game Design and Development Track**

Scratch, Javascript, UNITY, C#,
3D programming, Minecraft
JAVA programming

➤ **Web Design and Development Track**

HTML, Javascript and CSS

➤ 3D Printing

➤ VEQ IQ Robotics

School Offerings:

- **Game Design and Development**
Scratch and Javascript
- **Web Design and Development**
HTML, Javascript and CSS

Current Fall Sessions offered:

French Road Elementary School

Brighton, NY Grades 3-5

Victor Intermediate School

Victor, NY Grades 3-6

Partnerships with the Schools

- Collaboration with the PTSAs
- Using school's computer lab facilities
- High school student Volunteers
- At-school Class Procedures

Contact Information: info@icancodeclub.com

An Integrated Computer Programming Learning Platform



Partnered with MVCodeClub in San Francisco, CA

3 Centers in SF + Offering Program at many schools

- Curriculum and Course Builder
- Integrated Coding Environment
- Social Network for Students, Parents, and Teachers
- Student Tracking and Progress
- Student / Parent / Instructor / Director Portal
- Online Instructor Training Module
- Student Class Scheduling platform

Open Source Coding Platforms



MIT Scratch is a free visual programming language and online coding community where you can create your own interactive stories, games, and animations.

Other:

Code.org

Codecademy

Khanacademy

Hopscotch

The screenshot shows the Scratch Wiki interface. At the top is a blue navigation bar with links for 'Create', 'Explore', 'Discuss', 'About', and 'Help', along with a search bar and a 'Log in to the Wiki' link. Below the navigation bar is a sidebar with a 'Scratch Wiki' logo and sections for 'Navigation' (Scratch Wiki Home, Random Page), 'Tools' (What links here, Related changes, Special pages, Printable version, Permanent link, Page information), and 'In other languages' (Deutsch). The main content area is titled 'Scratch Terms Glossary' and contains a note that 'Terminology' redirects to 'Forum Terminology'. It then states that the glossary lists words related to Scratch and provides an alphabetized list of terms: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, and Other. The 'A' section lists terms like 'Advanced Topics', 'Animation', 'Announcements', 'Answer', 'Archived Forums', and 'Argument'. The 'B' section lists 'BBCode', 'Blocks', 'Boolean Block', 'Broadcast', 'Build Your Own Blocks', 'Bump', and 'BYOB'. The 'C' section is partially visible.

Curriculum Delivery (after school setting)

*Game Design Course and Lessons Delivery
Demonstration*

<https://icancodeclub.mvcodeclub.com>