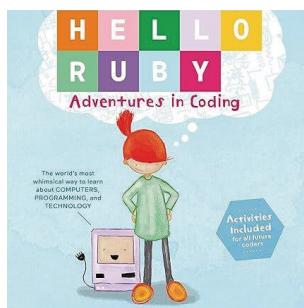


COMPUTER SCIENCE

"Hello Ruby: Adventures In Coding"



“Hello Ruby” is a very different classroom enrichment program for 4-H. Usually, we create curriculum for classrooms, clubs and homeschools. However, sometimes we find some great educational resources and feel the need to share. In 2015, Linda Liukas wrote “Hello Ruby: Adventures in Coding.” She realized that the first step to being a good computer programmer is to understand computational thinking. To this end, she wrote a well-illustrated children’s book on “coding” that includes no programming languages. Instead, it embraces the use of computational thinking in order for children to solve puzzlers and challenges. While the book includes excellent exercises, other, free, resources allow this little book to become a full educational unit; or, even multiple units.

The San Francisco Unified School District (SFUSD) has **written K-2 lesson plans based on this book and added some of their own activities (in English and Spanish)**. Their page can be found at: <https://sites.google.com/sfusd.edu/k-2cs/orange/unit-1-unplugged-cs> . The site provides the California state standards. You will find the related Indiana K-2 Computer Science Standards below. Arguably, other Computer Science standards may be covered by “Hello Ruby,” however, the standards listed are clearly part of the SFUSD program.

In addition, the web site by the author “Hello Ruby” contains numerous educational activities and puzzles that will not only appeal to students but will allow instructors to pick enrichment materials that best fit their needs. The site is located at: <https://www.helloruby.com/>

During 2024-2026, 4-H will provide the book “Hello Ruby: Adventures in Coding,” to educators or homeschool enrichment groups who want to teach computational thinking to children in grades K-2. All we ask in return is an email noting: how many students took part, basic demographics (requested; but not required) and how many minutes you spent with students using the “Hello Ruby” curriculum.

Indiana State Standards:

K-2.PA.1: Breakdown and plan the order of the steps needed for a desired outcome to accomplish the goal.

K-2.PA.2: Using age-appropriate vocabulary, explain steps taken and choices made to improve the design of a sequence.

K-2.PA.3: Develop programs with sequences and simple loops to express ideas or address a problem.

K-2.PA.4: Identify and fix (debug) errors in sequences and simple loops.

K-2.PA.5: Model daily processes by creating and following algorithms (i.e., sets of step-by-step instructions) to complete tasks.



Extension

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