



Coding for Kids

According to a recent article from Forbes.com, the average salary for a computer science major is \$75,071. At CJJ, the only time our students see computer code is if they seek it out for themselves. Many graduates of small towns take a computer science course for the first time in college and instantly feel intimidated by the complex functions. I would like to implement a one week camp to help students learn how to code and create their own game to be controlled by a “Makey Makey”.

The Makey Makey is a simple tool that allows students to use everyday objects and turn them into an extension of the computer. Bananas become spacebars. Play dough can be used as a nintendo controller. Who knows what else our students will come up with? The Makey Makey allows them to build new inventions using a circuit board, alligator clips, and USB connection.

One of the Next Generation Science Standards key components is Engineering Practices which “describe what scientists do to investigate the natural world and what engineers do to design and build systems”. The Makey Makey is the perfect tool to help foster student creativity while allowing them to ‘design and build’ their own inventions.

Students will use the website, scratch.mit.edu, to help understand the basics of coding. Once a basic level of understanding has been established, they are able to build upon their knowledge and craft their own game. Advanced coders will create original games with complex codes, while the beginners can follow step-by-step tutorials. A one week, half-day session will be enough for students to get introduced to the interface and build their own game.

Students who live in the “right” brain can benefit from coding. In order to carry out their creative ideas, they must use logic, problem solving, and organization from their “left” brain to fulfill their visions. When students are faced with math problems they may not understand, they instantly shut down. Learning to code is trial by error. Students learn they must fail in order to achieve the correct coding. I hope to see this mindset transfer into other academic areas.

Technology isn’t going away. We can either let our students continue to be the consumers or we can help them become the next great entrepreneur. Thank you for this opportunity.

Sincerely,

Brittney Anderson

Conductivity & Coding

Taught by Mrs. Brittney Anderson

The Learning Center at CJI would like to offer students a coding workshop this summer. All supplies will be provided. Students enrolled in the Adventures or Scholars programs may attend, and we will make sure that they get to the computer lab and get back to the other program. This program will be in the High School Computer Lab.

Kindergarten - Single Session (MAX = 12)

AUGUST 6th - 8:30-9:30 AM One hour conductivity lesson using the Makey-Makey.

1st-2nd grade- Single Session (MAX = 12)

AUGUST 6th - 10-11 AM One hour conductivity lesson using the Makey-Makey.

3rd/4th grade: Two Sessions

AUGUST 6th - 1-2 PM; 1) One hour conductivity lesson using the Makey-Makey. (MAX = 12)

AUGUST 7th 1-2 PM 2) Students will code a game following teacher led directions.

5th/6th grade: Two Sessions

AUGUST 6th - 2:30-3:30 PM 1) One hour conductivity lesson using the Makey-Makey. (MAX = 12)

AUGUST 7th - 2:30-3:30PM 2) Students will code a game following teacher led directions.

3rd-7th grade: Code Your Own Game (Two 1-hour Sessions)

AUGUST 8th- 2-3 PM AUGUST 9th: 2-3 PM

Students should have come to the first two sessions to do this or have some experience with coding. (Incoming 6th and 7th graders are welcome!)

If your child or you would like to attend the program, please fill out the form below. Please register by **August 3** so supplies can be purchased. Late registration will be permitted if space is available. A minimum of 5 participants are needed to run each program. (Please check all that apply)

_____ My child will attend all days at their grade level session.

_____ My child will _____ August 6 _____ August 7 _____ August 8 _____ August 9

Parent's Signature _____

Email Address _____ Daytime Phone _____

_____ I will pick my child up _____ My child will walk or ride bike home