

Chris Kratoska (right) and Kaleb Wait talk the same language.

Game On

Code Ninjas uses the power of video games to educate.

BY AVA DIAZ

PHOTO BY CHRIS EMEOTT

THROUGH THE POWER of interactive, self-developed video games, Code Ninjas in Chanhassen is sparking interest in coding and robotics in youth as young as

seven years old.

Code Ninjas combines an activity that kids love—playing video games—with one of the most valued job skills in the market today—coding, so says Chris Kratoska, director at Code Ninjas in Chanhassen.

Inspired by the Japanese martial arts form of ninjutsu, the environment at Code Ninjas is structured around a traditional dojo with the students as the ninjas, teachers as the sensei, and nine colored belts (white, yellow, orange, green, blue, purple, brown, red and black) signifying the coding level of each ninja.

Centered on logistics (understanding) and syntax (communication), the program has two parts to each belt level: step-by-step instructional exercises and challenges, where students take what they learned and create their own codes. At each belt level, the ninjas must complete a total of 10 challenges, consisting of basic coding variables to ensure understanding of the concepts before moving toward the end goal of creating a game for the App Store and Google Play at the black belt level.

Though it is important to learn the basic concepts, Kratoska says that the “copying and pasting” nature of the step-by-step instructions don’t necessarily ensure that the students are retaining all of the information. However, by intertwining the variables in these challenges with the build-your-own portion of the games, the ninjas are able to adhere to the coding language.

“Coding is in virtually every electronic machine,” Kratoska says. “Coding is the language in which we speak to machines, and it is necessary to communicate in a language that they understand.” For

computers, it’s the only language that everything, I think it is neat.”

Despite being a middle schooler, who has always had an interest in computers and built one by himself last summer, Kaleb says he had little-to-no coding experience prior to his involvement at Code Ninjas. His involvement every week since he joined in April is making his computer dreams a reality. “What is cool about it is, they are giving kids the chance to explore something that they innately love and know that it can be something that they can do later in their life,” says Kaleb’s mother, Merilee Johnson. “The kids want to learn. It is not competitive, and it is about self-involving.”

Emphasizing fun, Kratoska strives to make Code Ninjas a place for kids to develop their passions and strengthen their skillsets no matter their age or gender. Statistically, coding is a male-dominated field; however Kratoska says that the female-to-male student ratio at the Chanhassen location is actually higher (in terms of females) than the national average. Though it will take time to shift that ratio in the career world, Kratoska hopes to continue making an impact through his encouragement and willingness to seek teachers, all of whom are high school or college students with an interest in STEM, who can connect with the kids through shared interest in the field.

Kratoska says that these relationships are beneficial because the kids have role models, who are applying the same skills that the students are learning in day-to-day life. With this full-circle environment and these relationships, the ninjas are reminded that they are capable of achieving their own goals. “I like the feeling of knowing that I did this,” Kaleb says about the challenges that he has conquered at his white belt level. “How many people can say that they made this?” **SWM**



CODE NINJAS: CHANHASSEN
426 Pond Promenade, Chanhassen
952.381.9956 // codeninjas.com

@codeninjaschan
f Code Ninjas (Chanhassen, MN)
@codeninjas