



Orchard Park Computer Science March 2022 newsletter

Do any of us really know what happens when we type in a Wordle guess and press Enter? Probably not, but the ideas and notions of the data being flashed around the globe are astonishingly massive. Computer Science topics expose students to these ideas and it begins with learning soft skills, learning to think critically, logically, and creatively, and learning to collaborate and communicate with other people.

Our elementary level courses using [Blue-Bot \(K-2\)](#) , [OSMO \(K-2\)](#), and [Lego WeDo \(3-5\)](#) systems provide CS foundational opportunities which are excellent on their own but also allow for transference to Middle and High School classes.

The middle school level projects using [Lego Mindstorms \(6\)](#) and [Hummingbird \(8\)](#) systems will build on exploratory opportunities and encourage progressive curricular growth from the all-inclusive middle school courses into high school elective classes in all academic, technological, artistic, and extracurricular areas.

Our 8th grade Computer Science class utilizing [Code.org](#) has been engaging students in creative projects learning Problem Solving and Computing, Design Process, and implementing soft skills building Hummingbird robots, interactive animations, and games. Drone piloting is breaking through as well as an opportunity to learn some CS while utilizing fresh technologies.

In our high school classes students are immersed in [Alice 3.0](#). Some have built programs which can be [experienced in virtual reality using Oculus Quest 2](#).

Ongoing classes in high school CS include building a Wordle app in C++, Create Performance tasks in APCS- Principles, and springtime review for APCS- A (Java).

Moving us forward in a post-pandemic learning environment our district is researching an implementation strategy to re-design our K-5 experience. Focused in [ISTE standards](#), our students will develop the 4 C's: Collaboration, Communication, Creativity, and Critical Thinking. We will be running fresh curriculum starting Fall 2022.

The Orchard Park Central School students will learn and gain life skills while experiencing lessons being continually developed for our Elementary, Middle School, and High School computer and technology classes. Reach out to me or one of our colleagues in those areas for ideas and any opportunities you may think would benefit our students.