



Computer Science Immersion Cycles

Paw Creek's computer science immersion takes place in three distinct "cycles," each focused on using a different technology platform to learn about computer science. At the end of each cycle, students complete a major project called an Epic Build to demonstrate what they've learned. We'll host several events called Epic Build Showcases, where students will have the opportunity to share their projects. These events are simply amazing!

- 1 The first cycle is done using a coding tool called Scratch, developed by researchers and engineers at MIT. The students use simple blocks of code that they drag and drop into position to make their projects come to life! By using these code blocks, students learn about the logic of computer science without needing to worry about typing their code (like we typically imagine when we think of computer code). The Epic Builds in Scratch are some sort of interactive story, or a working video game! Students incorporate this work with their other subjects like history and science.
- 2 The second cycle is all about LEGO! At Paw Creek, every student gets to work with these amazing materials. The younger students build huge structures and cities using computer science concepts, and the older students build and program real robots to perform tasks. This gives our students a hands-on experience, so they can really FEEL what computer science can do. You've got to see it, and hear the students talk about it, to believe it.
- 3 The third cycle uses the popular game Minecraft to teach students about computer modeling and text-based programming. This is when students learn how to use the command line of their computer, and students in fourth and fifth grade learn how to write actual Java code! We use what we've learned in Scratch and LEGO to do great things with computer science.



Getting Involved at Paw Creek

SCHOOL-WIDE EVENTS:

Curriculum Night: Parents come out to learn more about the curriculum and goals for their child's grade level.

International Night: A time for families to come together to learn about different cultures while tasting different foods from around the world. Students and families can also showcase their cultural talents with the school community.

Family Fun Night: An annual event where families visit classrooms to make and take literacy activities that can be used at home while engaging in our school's core value of fun. We have bouncy houses, game stations, face painting, food, and door prizes.

Quarterly Awards Ceremonies: Teachers and staff celebrate the accomplishments of our students each quarter.

Math Fair: Students create and share mathematics based projects.

Science Night: Community partners help students and families create science projects from everyday materials.

Pastries for Parents:

A time for parents to learn and share strategies for supporting the social and emotional development of their children.



EXTRA-CURRICULAR ACTIVITIES:

- Girl Scouts
- Girls on the Run
- Coding Club
- Crochet Club
- Cheerleading
- Art Club
- Gardening Club
- Robotics Club
- Basketball Team
- Drama Club
- F.L.Y. (Forming Leading Youth) Club



PAW CREEK PTA

- Grade level sponsored field trips
- Student dances
- Teacher appreciation
- Student incentives



Special Areas Classes at Paw Creek

The Special Areas classes at Paw Creek offer a variety of concepts that will enhance critical thinking, problem solving and effective communication skills.

SCIENCE: An engineer, a chemist, a scientist...At Paw Creek Elementary, students in grades K-5 get an opportunity to transform themselves during their weekly science lab visit. Engineering and structural design skills are put to use as students participate in STEM challenges, such as Building for a Hurricane. Launching balloon rockets, constructing constellation projectors, concocting slime, creating homemade ice cream, and erupting volcanoes have definitely been "fav 5" activities. Our students are grateful for this opportunity as we are one of few elementary schools in the district to offer science lab school wide. The lab is a place for hands on learning, investigation, critical thinking, real life application, and most of all, FUN!!

ART: The visual arts program at Paw Creek offers a hands-on learning experience through integrated lessons such as math, science, social studies, and literacy. Students create experiments that develop their fine motor and problem-solving skills. Students compare and contrast a variety of materials and learn how they are used. Throughout the year, students learn the works of different artists and how they express themselves differently. Each child has an Artsonia page where their artwork is displayed on a website as a portfolio. Students can write artist statements about their artwork. Parents can connect with their child and write messages to them about their artwork.

MEDIA: Paw Creek's Media Center is a hub of activity that encourages creativity and collaboration. Students have access to books and digital resources that help to inspire a love of reading and help to develop literacy skills. In addition, Makerspace centers support inquiry-based learning by allowing students to experiment, create, and test out ideas. Students are able to work together and share ideas while problem solving and creating through hands-on activities. Makerspace gives students the freedom to apply STEM concepts in a creative way. As a result of the Digital Learning Conversion Program and Code to the Future, Paw Creek is fortunate to be a 1:1 technology school. This means all students are assigned a Chromebook for their individual use. Additionally, students also have access to a variety of technologies in the Media Center, including Chromebooks and iPads. Some focus areas of the media program are digital citizenship, computers skills, coding and digital presentations.

TECHNOLOGY: Computer Science is about logic, problem solving, and creativity. Computer science is vocational, foundational and EPIC! Understanding technology and how it is used is vital for every member of society. Paw Creek's Technology Lab has a total of 31 desktop computers for students to use and learn preparation skills for tomorrow's workplace. Students in grades K-5 are introduced to keyboarding and computer skill applications to include Microsoft Office, web and social skills, and graphic and writing skills. All are integral to advance in computer science in today's technology world. Students are challenged with STEM-based assignments to include research via the web that supports classroom curriculum, maneuvering from different educational websites and Google to find necessary research to complete assignments. The Technology Lab is a place where learning is fun and enjoyed by every student!

PHYSICAL EDUCATION: In Physical Education we are embracing technology to create a more varied and dynamic classroom. Integrating technology with today's sports and team games means appealing to the interests of many different students and ability types. The most important aspects of a successful physical education program, or any educational program for that matter, is that it is visible to the school and wider community. By making the learning that is taking place visible to all stakeholders it promotes connection with the community, allows advocacy for quality physical education, and allows for celebration of student achievement. The use of technology to teach physical health allows for more physical activities and a meter to show how important goals are set and reached. Currently we use website resources such as YouTube, Go Noodles, and Vine (for parent viewing).

MUSIC: In music class, we have included science and technology to make music more engaging. Students learn about the science of sound and how different instruments produce sound through project-based learning. During coding, students select music that correlates with the movement of their sprites and use music apps that help students practice on different instruments. Students continue to participate in singing, dancing and playing instruments for our annual music concerts.