Math program focuses on developing students’ deep understandings of applicable mathematical concepts

The mathematics program in Chimacum School District offers a unique blend of problem-solving and skill-building. The program is built around the idea that a strong foundation in math paves the way for student learning and career success in all subject areas.

“In order to be an informed citizen and able to make logical and rational decisions, our students need to be able to understand the science and data available to them,” explained Joanne Schmitt, the district’s mathematics department chairperson and a Chimacum Jr./Sr. High School math and science teacher.

“Mathematics is more than just numbers and functions; it is the study of patterns, change and logic. Through mathematical studies, students learn to problem solve, see patterns and think analytically. These skills will be used throughout their lifetimes in a variety of settings.”

Tapping into the strength and potential of all students, the district’s teachers present math concepts in a way that’s not only accessible, but tangible.

For example, longtime Chimacum Jr./Sr. High School math teacher Dave Porter likes to challenge his students to calculate the cost of the precise amount of paint they would need to purchase in order to cover his classroom’s entire surface area.

Similarly, Schmitt’s calculus students are tasked with inventing 3-D objects that could have real-world applications. Students calculate their object’s surface area and volume, then investigate the price of materials to determine manufacturing costs.

“These and other projects are very fun for the students—and me!” said Schmitt. “It helps students see that math is ‘real.’”

Taea Hall, who teaches math to 7th and 8th graders in the district, said that having a practical understanding of mathematical concepts helps students to become more well-rounded individuals.

“Math helps you tell time, helps with your finances, makes you a better cook and will come up in some way in pretty much every profession,” said Hall. “Math allows us to express our complicated world in a way that everyone around us can understand. Math equations don’t have to be translated and the universality of math is one of the many things that makes it such a powerful tool and an essential life skill.”

Behind the Program: Dave Porter

Long before he was a teacher at Chimacum Jr./Sr. High School, Dave Porter was a Chimacum School District student! After graduating in 1977, he went on to earn an associate degree from Peninsula College, a bachelor’s degree from Western Oregon University, and a master’s degree from Seattle Pacific University. He played basketball in college and was drafted by the Portland Trailblazers in 1982 (he also played basketball in Australia).

Since returning to Chimacum to teach in 1990, Porter has served as a math teacher, P.E. teacher, history teacher and driver’s ed. instructor. He also spent 19 years as the district’s athletic director, and eight years as an assistant principal.

Porter’s connection to Chimacum and its schools is truly a family affair. His father, Clinton, was a teacher in the district from 1958 to 1985. His family has been in the Chimacum area since the late 1880’s. His great grandparents, Hans and Helena Swanson, were early pioneers and Swansonville (near Port Ludlow) was named after them.
In Chimacum School District, our students are combining Science, Technology, Engineering, Arts and Mathematics (STEAM) to learn, explore and problem solve in creative and innovative ways. Follow all of our STEAM learning at www.csd49.org.

In Heidi Johnson’s classroom, first graders learn how the world works through math

Inside Heidi Johnson’s first grade classroom, you’ll find a group of wide-eyed young learners with countless questions about how the world works. Look a bit closer, and you’ll discover that the framework for finding those answers is rooted in one core subject: mathematics.

“Math opens the door for our exploration in other subjects,” explained Johnson, who’s been with Chimacum Elementary School since 2015. “It goes hand-in-hand with science; it models phenomena and relationships in our observable environment while expressing concepts from the understood to the mysterious.”

Demystifying the patterns and rules of math doesn’t come without its challenges of course, but Johnson’s first graders haven’t missed a beat. Already this year, the group has studied algebraic thinking, the foundations of multiplication, perseverance and problem-solving—all while becoming fluent in addition and subtraction. Yet, perhaps the most compelling accomplishment is when Johnson sees her students learn how to apply their math skills to problems off of the page.

“To witness students’ ability to execute math problems using Legos, rocks, blocks, dolls, balls, really anything around them, along with multiple strategies to solve the equation or problem, is exciting,” said Johnson. “We see the impact of this within the classroom as students collaborate, examine, execute and share feedback in their work.”

Johnson knows that by preparing her students for a world of math she is ultimately giving them the tools to understand, analyze and impact their community.

“Students need solid math skills as they head to the future,” she said. “Problem-solving, reasoning, communication, perseverance and precision are needed every day.”

LEFT: A student in Johnson’s class designs a town, using math to layout streets and buildings.

Small projects add up

With an understanding of the correlation between the condition of school facilities and student achievement, several small improvement projects have recently been completed across the district to help meet goals for student learning. Completed projects include:

- Painted classrooms & building exteriors
- Upgraded fire alarm systems
- Roof replacement at Chimacum Creek Primary
- New drinking fountains with water bottle stations
- Restroom improvements
- Technology upgrades

The district thanks the hardworking contractors, laborers and volunteers who brought these projects to life, as well as the Chimacum community, whose support makes it all possible.