

March 2021

WEST SOUND STEM NETWORK Report Highlights:

Washington State Senate
Apprenticeship Briefing



STEM Café: NASA's
Artemis Lunar
Exploration Program



Tides and Currents STEM
Café

On the Horizon...

March 17, Cryptography
STEM Café



March 18, Tides and
Currents STEM Café



March 2 & 24, *Hidden
Figures* Virtual Book
Study

“To the Moon and Beyond!”

An Introduction to NASA's Artemis Program

West Sound STEM Network offered the first of two astronomy-based STEM Cafés to teachers this month—“Artemis: To the Moon and Beyond!”

NASA's Artemis program, the “twin sister” to Apollo, will land the first woman and the next man on the moon's South Pole by 2024. Using innovative technologies to explore more of the lunar surface than ever before, NASA will establish a sustainable presence on the moon in order to prepare for continuing missions to Mars.

Teachers in the STEM Cafés explored the aspects of the program, took a deeper look into exciting new technologies being used by NASA and NASA resources that can be used with students. Also discussed was the new space station designed for the sole use of the Artemis program, Gateway, and the role it will play in the program.



Café activity with Dave Stitt, Phases of the Moon

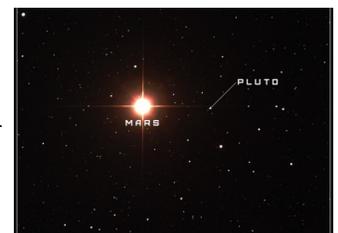
Said Café presenter Dave Stitt, “Teachers explored what a moon base might be like and calculated the length of a lunar day.” Answer: 28 Earth days long!

“We examined water resources at the moon's South Pole as that water will play a major role in producing rocket fuel.” He explained the need to test the technology as this process would eliminate the need to transport fuel to the lunar station. “Successful tech on the moon will predict likely success for travel to Mars from the lunar station!”

Partnering for Teachers!

West Sound STEM Network's Northwest Earth & Space Science Pipeline (NESSP) professional learning cohort of teachers will have the opportunity to connect with one of the Network's newest members, Slooh. In NESSP sessions, Russ Glenn, Director of Education at Slooh, will facilitate ongoing discussions with the cohort to explore astronomy and the newest technology available for use with students. Launched in 2003, with four telescopes at the Institute of Astrophysics of the Canary Islands, Slooh now has a worldwide network

of 15 robotic, mountaintop telescopes providing real-time viewing. All of which can be remotely viewed and controlled by users. WSSN districts received grant-funded teacher memberships to Slooh so that our region's teachers can use the telescope network with their students in their classrooms and with remote learning.



Courtesy, Slooh website

Tides & Currents & Waves, Oh My!



NWMC Lunar Tides Chart

Nearly sixty teachers attended the Northwest Maritime Center (NWMC) and West Sound STEM Network STEM Café: Tides & Currents on January 27th. Presenters Ace Spragg and Chrissy McLean of NWMC

led an exploration of how tides and currents work, how we can predict them, why predictions aren't always accurate and why they are not the same everywhere on Earth.

Teachers discussed how tides influence the weather, climate and ecology of the Salish Sea and how that knowledge helps in everyday life: how we use tides and currents for recreational activities or in the shipping and seafood industries. They explored connections to Maritime careers, learned how to use online tools and resources to better understand tides and currents and how to effectively apply this knowledge to STEM teaching.

Tides and currents exercises illustrated the effects of the moon's gravitational pull and underwater topography and teachers interpreted nautical charts and calculated the scope (or angle) needed for effectively anchoring a boat. A repeat of the well-attended event is scheduled for March 18th.

Network Members Work to Support Student FAFSA & WASFA Completions

Network member Graduate Strong experienced a fabulous turnout for their bi-lingual financial aid filing event for Spanish-speaking students and their families on February 23rd. The event (one of several) was co-hosted by Washington College Access Network and supported by numerous volunteer Navigators from across the community.

WSSN, working under the OSPI-awarded Financial Aid Proviso aimed at raising completion rates in the state, is hosting events from December 2020 into late Spring 2021. Volunteer Navigators will be answering questions and helping students and families complete their applications. The next open event is scheduled on March 11th.

STEM Notes...

Karen Borders, Executive Director of West Sound STEM Network, and Robert W. Andrade, Jr., Market Director and General Manager at Johnson Controls, Inc., delivered a presentation early this year detailing the Controls Technology youth and adult apprenticeships to the Washington State Senate's Higher Education & Workforce Development Committee. The presentation emphasized the positive impact apprenticeship expansion can have on the state's economy.

Chris Reykdal, Washington Superintendent of Public Instruction, spoke to the Network's Leadership Team about his priorities for the immediate future and answered questions regarding re-opening of schools.

The next generation of virtual STEM Like ME! events were piloted this month. In non-remote settings, the program pairs STEM professionals with small groups of middle school students to talk about their STEM careers, how they got there and engage students in a short hands-on game or demonstration. New sessions feature recorded interview clips, fun facts and relevant figures and a trivia-type team game for students to play based on the video content. As noted by the teachers, student's laughter and competitive scores indicate the new format is a success!

Since its introduction in April 2020, WSSN's most popular workshop, *Hidden Figures* Virtual Book Study, more than 850 teachers have participated! Book Study #7 started on March 2nd and has over 85 teachers participating! Milestone 1,000—just around the corner!



Contact: Dr. Karen Borders
Executive Director, West Sound STEM Network
borders@skschools.org | (360) 874-6286—Work



West Sound STEM Network Members