**SMILE** Science and Math Investigative Learning Experiences



Oregon State University Precollege Programs



**Teacher Newsletter - November 17, 2022** 

## Fall Family Math and Science Nights – Nyssa, Willamina, and Woodburn

SMILE teachers, staff, and partners have been busy beavers, as they continued to participate in Family Math and Science Nights across the state. Nyssa held their event on Nov. 3, Willamina's was held on Nov. 8, and Woodburn's was on Nov. 9. Though the activities varied, all events had one thing in common: **Families had fun engaging with hands-on science activities!** *Awesome job - Nyssa, Willamina, and Woodburn!* 

*Left Photo,* Willamina: families creating "thaumatropes" from LaCuKnoS. *Right Photo,* Woodburn: Catrina Falfen, SMILE teacher from Lincoln Elementary, leading an awesome Ozobot activity.



*Next up:* Fall Family Math and Science Nights wrap up with Cave Junction's, on Nov. 17.

# Lorna Byrne MS Club's Field Trip



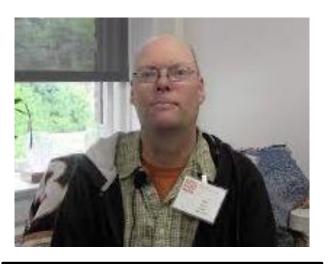
Lorna Byrne Middle School SMILE members tour the Rogue Creamery Dairy Farm.

SMILE teachers Tim Talty, and Sally Clements, from Lorna Byrne Middle School in Cave Junction, took their SMILE members on a fun-filled field trip in October. Tim provided this synopsis: "We toured the Roque Creamery Dairy Farm in Grants Pass, where our students learned about animal husbandry, the role robotics plays in the modern milking practice, and how good Roque Creamery's cheese is! We also visited Wildlife Images Rehabilitation and Education Center where students met a huge variety of rescued animals, some being rehabilitated to eventually be released and others to be permanent residents." Sounds like an informative (and tasty) adventure!

# Ken Dickey Receives Regional Teacher of the Year Award

**Congratulations to recently retired SMILE teacher, Ken Dickey!** Ken has received the Regional Teacher of the Year Award and is now in the running for Oregon Teacher of the Year, along with 16 regional winners. The Sept. 28 edition of Malheur Enterprise, featured an article about Ken, by Les Zaitz. Here are a few excerpts:

"While teaching chemistry to high school students, Ken Dickey was known to break into song. He tweaked the lyrics to suit the classroom. Dickey, who recently retired after 29 years at Nyssa High School, isn't likely to be releasing a



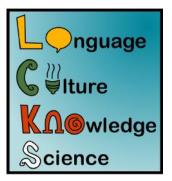
Retired SMILE teacher, Ken Dickey.

CD soon. But his passion about teaching in a way that reaches students has earned him designation by the Oregon Department of Education as Regional Teacher of the Year. His former students put him in contention with their nominating comments. One student wrote, "Mr. Dickey has a significant impact on many of us, and his practices as an educator have helped us pursue our goals." Another wrote, "He opened doors for us that we didn't know were there and this nomination is one way I feel I can give back for all he has done for students." Dickey retired from Nyssa in July and moved to Corvallis to be closer to family and to continue participating in the SMILE program."

Again, congratulations, Mr. Dickey, on this distinguished, well-deserved honor!

# LaCuKnoS Corner – The Managing Forests Together Lesson

The very first forestry lesson we developed with the LaCuKnoS team is *Managing Oregon's Forests Together*. The overall objective of this lesson is to have students learn to make decisions about how to manage different forest units that address competing demands such as maintaining biodiversity, meeting wood processing needs, and reducing risk of forest fires. Balancing these competing demands are a very important part of the work that forestry professionals and landowners deal with every day.



## The lesson is divided into two class period sessions:

**Session 1** provides basic knowledge about the role of landowners and foresters and discusses forest management options using the "jigsaw" instructional strategy.

**Session 2** builds on previous knowledge and allows students to develop and present their forest management plans using a claim-evidence-reasoning format.



*Photo:* Teachers using the *woodland stick* during the 2021 Summer Teacher Workshop.



Scan for LaCuKnoS Lessons

### Some of the specific goals of this lesson are:

- Familiarize students with forestry concepts and related language
- Familiarize students with the roles of key stakeholders that do forest management
- Increase awareness about how forest management is planned and how landowner objectives affect what a forest looks like
- Increase understanding on the complexity of managing a forest with competing demands

After completing this lesson, you might consider working on the *woodland stick extension*, an activity that can be completed outside. Students measure tree diameter, height and estimate volume using a simple tool that is based on triangles. If you would like to do this extension activity with your students, please reach out to Jay Well (jay.well@oregonstate.edu) or Cory Buxton (buxtonc@oregonstate.edu) and we will send you woodland sticks.

# Virtual Family Math and Science Night (VFMSN)

**Coming Soon - Sensational Sensors** 

Join us:

Tuesday, December 13, from 5 to 6:30 PM (PT) Live on Zoom – hosted by SMILE

## During this live, virtual event, students will:

- Interact with college students at OSU!
- > Engage in several hands-on STEM activities and share their results.
- > Learn about how we use our senses to interpret the world around us.
- > Learn about sensors we interact with in our daily lives and how they work.

### **Event Timeline:**

- After Thanksgiving Break Activity Materials will arrive for ES level clubs
- Tuesday, December 6, from 5 to 6 PM (PT)/6 to 7 pm (MT) Teacher PD
- Tuesday, December 13, from 5 to 6:30 PM (PT)/6 to 7:30 pm (MT) VFMSN

# Where are the orchard bots? OSU shares the latest research on tree fruit robotics

"Every apple you see at the grocery store was picked by a human hand," said Joe Davidson, assistant professor of robotics at OSU's College of Engineering.

The industry, however, is pushing to automate in the face of rising labor costs and a shrinking agricultural workforce.

What's the solution? Some growers are setting their sights on robots.

Researchers at OSU's Collaborative Robotics and Intelligent Systems Institute are developing three robotic tree fruit systems: a harvesting robot, pruning robot and fertilizing robot.

<u>Click Here</u> for the full article from Capital Press.



Graphics and photos of mechanized pruning. *Photo courtesy of Joe Davidson/OSU* 



# **Feeling Grateful**

Dear SMILE Teachers,

At SMILE, we are extremely thankful for YOU! The time, thought, and dedication you put into SMILE every week is impactful to your students and appreciated by the entire SMILE team. We hope you have a relaxing Thanksgiving Break, full of great food and company. Between getting clubs up and running for the year and hosting Family Math and Science Nights, it's been a fruitful fall because of your efforts. We look forward to what the winter season brings and to seeing you in person at the 2023 Winter Teacher Workshop!

With Gratitude, The SMILE Team



SMILE Program, Oregon State University 18 Gladys Valley Center, Corvallis, Oregon 97331 Phone: 541-737-0534 Email: SMILEprogram@oregonstate.edu Copyright ©2021 Oregon State University <u>Disclaimer</u>

