

Sly Park Environmental Education Center Virtual Learning Program

Project Overview

For over 50 years, the **Sly Park Environmental Education Center** (**SPEEC**) has provided students from the greater Sacramento area, and beyond, with opportunities to develop their natural science knowledge and skills at the Pollock Pines campus. In response to the COVID pandemic, the SPEEC has developed a variety of virtual resources to provide instruction and experiences that enable students to better understand and care for their local environment. The Sly Park staff pivoted quickly to adapt outdoor activities and create innovative, flexible strategies to provide students with access to virtual instruction that, as closely as possible, approximates the original Sly Park program. This innovative program is currently referred to as the **Sly Park Virtual Learning Program**.

Background

The Sly Park Environmental Education Center was established by and is operated by the **Sacramento County Office of Education** (**SCOE**). The SPEEC was founded in 1970 as a partnership between the US Forest Service and SCOE. The SPEEC is certified by the California Outdoor School Association. Prior to the COVID pandemic, the Center provided outdoor science learning experiences aligned with critical Next Generation Science Standards (NGSS) to over 8,000 elementary students each year.

During a typical year, SPEEC teachers provide face-to-face lessons that include information about California local history, geography, and the park trails and their ecosystems. Students also participate in a wide variety of team building activities such as hiking, shelter construction, related arts and crafts, and other hands-on learning experiences. Through access to the Sly Park Native American Interpretive Center, students also learn about Native American culture of the region.









The SPEEC also provides support for regular classroom teachers and parents to prepare students for their experiences at the Center and to reinforce and extend student learning after their experiences at the Center.

Goals

To continue providing students with critical environmental science education during the COVID crisis, Sly Park has adapted the program to align with the requirements of a virtual learning environment. Among the goals of this virtual program are:



- Immerse students in academic and personal social and emotional growth opportunities.
- Provide quality virtual outdoor education experiences that focus on cultivating an appreciation and understanding of the natural environment and encourage students to become "citizen scientists."
- Align instruction and student experiences with Next Generation Science Standards (NGSS) and California's Environmental Literacy and Environmental Principles and Concepts which highlight the deep relationship between humans and the natural world.

Project Summary

There are two major components of the Sly Park Virtual Learning Program:

1. Distance Learning Lessons (Grades 2-8)

Sly Park teachers provide weekly virtual NGSS science lessons. The distance learning lessons range from 45–60 minutes and support the current unit of study for the class. Units include:

- Matter Movement
- Solar-Lunar Connections
- Sphere Interactions
- Forest Health

As the units are aligned with the NGSS, they are designed to provide instruction for two grade-level bands: grades 2–5 and grades 6–8.

2. Virtual Science Camp (Grades 5 and 6)

The Virtual Camp is an innovative opportunity for students who are unable to attend a Residential Science Program at Sly Park in person. During this 5-day virtual experience, students learn how to become "citizen scientists," capable of tapping into their natural scientist skills to better understand,





protect, and advocate for their local environment. Credentialed Sly Park teachers use Sly Park's unique ecosystems, video content, and teaching stations as a springboard for students to investigate and explore their local ecosystems—from the cracks in a sidewalk to a local park or waterway.

Virtual camp lessons are designed and sequenced to support students' academic, social, and emotional learning. Daily lessons include both real-time, interactive synchronous instruction and asynchronous instruction. Throughout the week, students build and refine their ability to observe and collect data from the world around them, problem-solve and engineer solutions, and analyze human

impact on the environment. Ultimately, students end the week as empowered "citizen scientists" who communicate their knowledge and promote change in their own community.

The Distance Learning Lessons and Virtual Science Camp components of the Sly Park Virtual Learning Program:

- Provide lessons that begin with personal reflections followed by appropriate sharing designed to encourage further reflection, develop communication skills, and promote social skill development.
- Include a home connection component in which students are encouraged, if possible, to share their learning and thinking with their families.
- Provide teachers with access to digital resources (linked within the classroom teacher support materials) including follow-up activities, graphic organizers, handouts, etc.
- Include lessons and activities that interface with digital tools such as Padlets, Jamboards, Zoom Polls, and Mentimeter.
- Are offered in both AM and PM virtual learning sessions. Teachers are contacted by program administrators to set a time that supports both the planned lesson/unit content and the specific classroom schedule.





Timeline

The Distance Learning Lessons began in September 2020 and will be presented through May 2021. The Virtual Science Camp was piloted in December 2020 and launched on January 11, 2021, with four classes.

The following table summarizes the number of districts and students served through January 18, 2021, as well as future sessions to be conducted for school districts.

Districts/Students Served to Date Distance Learning Lessons and Virtual Science Camp		Projected/Scheduled Sessions* Distance Learning Lessons and Virtual Science Camp	
Districts	8	Districts	14
Schools	17	Schools	45
Classes	45	Classes	135
Approximate number of students	1,350	Approximate number of students	4,050

* Requests are coming in daily, and the number of classes scheduled continues to grow. Currently, there is only a 22% vacancy rate (number of openings).

Evaluation

The effectiveness of the Sly Park Virtual Learning Program will be evaluated through surveys completed by teachers and principals. Students and their parents will also complete a separate survey.



For More Information

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