



SchoolsNEXT 2022-2023

Team #15

Woodland Elementary

Ashley Jene, Maya Bromberg, Sabina Sutaria

Bullis Charter School

Woodland Elementary

## **Introduction**

Our school, Woodland Elementary, is located in South Lake Tahoe, California. Woodland Elementary's mission is to connect students with nature and the community while focusing on their physical and mental wellbeing to ensure that students pursue their interests and passions through project-based learning (PBL). Woodland Elementary nurtures creativity from staff and students, as well as critical thinking and collaboration which is brought to every subject in school. Woodland Elementary has PBL that incorporates nature and art, offers hands-on experiences, and explores open ended questions with students in new engaging activities. We also emphasize social-emotional learning (SEL) by including a mixed grade class once a week using the PATHS curriculum.

## **Community**

Our school benefits the community and interacts with them to help everyone. A lot of South Lake Tahoe parents have longer commutes for work; therefore, we provide buses for students and an after school daycare for kindergarteners in case 12:45 is too early for pickup. We also offer free breakfast and lunch for all students. Additionally, after interviewing 1st, 2nd, and 5th graders, we found that many loved the idea of parents volunteering to help with hands-on activities and read-alouds to the class. This is a great way to give children a different perspective and hear more voices from the community. Furthermore, we host a community fair each year celebrating South Lake Tahoe. By working with local businesses and community members we aim to teach our students how Tahoe is unique while supporting local organizations. Other ways Woodland Elementary is involved with the South Lake Tahoe community is through the Heavenly/Vail Epic Promise program to support every student by teaching them skiing or snowboarding. Woodland Elementary also participates in the CalRecycle program; this goes hand in hand with the eco-friendly aspects of our school such as solar panels, a system to reuse water, and our green roofs.

## **Learning Environment**

We strive to connect students with nature to inspire and improve students' mental and physical health. According to the U.S. Department of Education, "Classrooms with the most daylighting had a 20% better learning rate in math and 26% improved rate in reading compared to classrooms with little or no daylighting." Because we provide lots of natural light with triple-pane glass walls in our classrooms, we increase students' performance and mood. For safety and temperature regulation, we have blackout blinds.

We sent a survey to elementary school students and found that 80% said they would learn better if nature was incorporated into the curriculum. We have an indoor garden in the middle of our building with natural sunlight and a lot of trees outside. Our survey also showed that while 80% of the respondents would love individual spaces to focus, 66.7% also love group projects,

which goes to show that students may prefer both options depending on the assignment. Because of this data, we are including materials to give all students the chance to work both individually and as a group. Inside the classroom, we incorporate private nooks and individual spaces to provide a safe, comfortable environment for the students that prefer solo work. We also have giant group tables in every classroom to support collaboration. Lastly, to give our students the best learning opportunities, our school has a 20:1 student teacher ratio ensuring individual attention and a stronger community in small sized classes.

## **Design Process**

Our group started by asking an initial question: “How can we make a school that provides better learning with projects that incorporate nature, is eco-friendly, and benefits the community?” We started by brainstorming ideas to support students and possible layouts. For example, we have special-ed classrooms and a counseling room in our main building to support kids. We thoroughly discussed ideas to make the buildings sturdy while taking into consideration snowfall, ecosystem, and energy conservation. Together, we finalized our design and built a scale model of our school with bass wood using the laser cutter. For extra information, we interviewed elementary teachers at our school and we had a zoom call with a class from Sierra House Elementary School, which is also in South Lake Tahoe. We learned that the school gets lots of snow in the winter and the 4th graders want extra coverage so they don’t have to walk in deep snow. In response to this concern, we designed our campus so that the main buildings were all connected. Also, Sierra House has bear encounters which causes them to go into lockdown, they don’t have sinks in the classrooms, they have snow days and smoke days, and they love science field trips. Additionally, we talked to experts on interior design and electrical engineering to get input about the layout of our learning spaces and sustainable power which helped us design our classrooms and the eco-friendly aspects of our school.

## **Conclusion**

In conclusion, Woodland Elementary has an eco-friendly environment that gives back to the community with the recycling program, sustainable power, parent volunteer opportunities and much more. Our school connects nature and students with natural light in our classrooms to improve their mental and physical health.