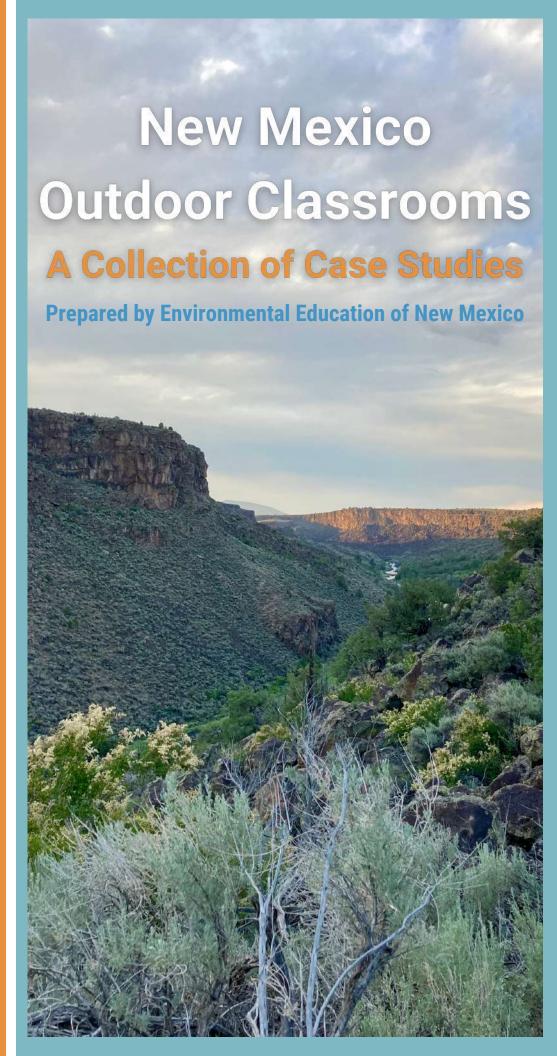


Cultivating the Future of Environmental Education Environmental Education of New Mexico

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WHY OUTDOOR CLASSROOMS?

OUTDOOR CLASSROOMS FACILITATE LEARNING

Outdoor classrooms provide a common-sense solution to support healthier kids, schools, and communities. Outdoor learning is an evidence-based approach directly in alignment with the NM Public Education Departments's vision, "Students in New Mexico are engaged in a culturally and linguistically responsive educational system that meets the social, emotional, and academic needs of ALL students," and supports New Mexico's Roadmap to Accelerated Learning and Renewal for the 2021-2022 school year.

This report highlights examples of outdoor learning taking place in schools across the state at this very moment. This snapshot of outdoor learning occurring in schools highlights the diversity of pedagogical approaches, subject area foci, 21st Century skills development, long-term opportunities for students, and experiences in outdoor and environmental learning.

The teachers and students highlighted in this report are passionate, innovative, and resourceful. They are relationship builders, collaborators, and deeply committed to the school community and beyond.

KEY THEMES

Key themes from the interviews include:

Collaboration - Educators and students are working across school departments, with administration, and importantly, the surrounding neighborhoods that, in many cases, become deeply invested in projects like school gardens.

Cross-Curriculum Impact - From farms and gardens to schoolyards and field trips, teachers are developing programs across content areas and are supporting students with project-based, community-centered, real, and relevant learning opportunities.

Investment - Teachers are investing time and resources and leveraging partnerships to bring outdoor learning to students in their schools. Support and investment for the work these educators and so many others can come in the form of more funding available to reduce need to apply for grants staffing support to help with coordination and multi-season projects such as school gardens.

ACKNOWLEDGEMENTS

Our deepest appreciation goes out to the teachers who participated in this project, including Corbett Wicks at Vista Grande High School in Taos, Andrew Lescht and Suzanne Maheshi Shakespeare-Jones at Santa Fe School for Arts & Sciences in Santa Fe, Lauren Gutierrez at New Mexico International School and Coronado Elementary in Albuquerque, Stephen Williamson at Cottonwood Classical Preparatory School in Albuquerque, Kate Porterfield and Susan Schipull at Wilson Middle School in Albuquerque, and Robbi Berry at Monte Vista Elementary School in Las Cruces. Additional thanks to the EENM Fellows for their support in creating the framework for this project.

VISTA GRANDE HIGH SCHOOL

Sustainable Agriculture Class - Taos



OPPORTUNITIES FOR STUDENTS

The sustainable agriculture class is part of Vista Grande High School's (VGHS) Career and Technical Education (CTE) curriculum. In 2020, the collaboration with the Taos Land Trust opened a window for the farm to continue to operate over the summer with students from VGHS and other schools employed through Youth Conservation Corps (YCC) paid internships. The students love the internships which extend into the school year through the Fall YCC program, which works with the students' school hours. Teacher Corbett Wicks highlights the content areas and cross-disciplinary nature of the farm program but also points to the social and emotional support that can take place on the farm, working in small groups and focusing on tasks.

Additionally, students can connect with their families through the sustainable agriculture class. Ms. Wicks' curriculum includes students sharing and developing recipes and sharing food stories in conjunction with the farm harvest days.

OUTDOOR CLASSROOMS FACILITATE LEARNING

In the sustainable agriculture class, students see the thing, smell the thing, and apply their ideas to the farm and then take the food home. The time outdoors, on the farm, and at the community farmers markets is "real and relevant and a part of the community." Relevance gives meaning to studies.

Ms. Wicks coordinates the VGHS's farm program and internship program, and she teaches CTE courses in sustainable agriculture and post-secondary skills. VGHS draws on an expeditionary learning model as a school and outdoor learning and fieldwork are an integrated component of the school design.

COLLABORATION

Collaboration with the school community enables the development of cross-curricular content that can be implemented during instructional time for language arts, math, science, social studies, and beyond. Community partnerships have enabled the development of a working farm where shared investment has helped to build out the farm infrastructure, provide staff and expertise, and support the students in the sustainable agriculture and internship classes with paid internship opportunities.

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SANTA FE SCHOOL FOR ARTS & SCIENCES

Expeditionary Learning - Santa Fe



RESOURCES FOR OUTDOOR LEARNING

Santa Fe Arts & Sciences Teacher Andrew Lescht makes use of many support curricula from programs like Project Wet, Project Archeology, and other **standards-aligned curricula** with activities that integrate well with the specific expeditions at the 3-4 grade level.

Creating expeditions is part of the structure and pedagogy of the school; planning and instructional time for outdoor learning on the expeditions are incorporated into the block scheduling.

In the 2020-21 year, the school was able to support on-campus learning outdoors with tents and seating. Mr.Lescht's students use folding camp chairs for class outside (and sometimes inside). For the 3rd and 4th graders, the tents have been an ideal location for independent work and book groups.

EXPEDITIONARY LEARNING

This year the expedition block for Mr. Lescht's 3rd and 4th graders is focused on two questions. The first question, "How many ways are there to enjoy nature?" leads to the second question, "Why is it important to advocate for nature?" As an Expeditionary Learning school, teachers follow a pedagogy that is child-centered and project-based. The expeditions move the idea of field trips to fieldwork, taking up an engaged approach to outdoor learning, and learning with the community at large. Through the 2021 expedition, Mr. Lescht's 3rd and 4th graders will explore their schoolyard nature trails, sites all around Santa Fe, and visit state and federal lands like Cerrillos Hills State Park and the Santa Fe National Forest. The students will focus on inquiry, critical thinking, and projects while they study math, reading, writing, art, music, socialemotional skills, and more.

FROM THE STUDENTS : MY EXPERIENCE WITH FIELDWORK...

"My experience with fieldwork affected me because
I found peace between myself and the natural
world. Another reason it affected me was by
leaving something, a gift. Something that seeped
into my mind and body that changed my view of
nature, appreciation. "- Cruz

"My experience in nature this year has taught me to be more aware of the issues our national lands face, all around New Mexico and the United States." -Sarafina

WILSON MIDDLE SCHOOL

 $Wild cat\ Blooms\ School\ Garden\ -\ Albuquerque$



STUDENT EXPERIENCES

For Susan Schipull (Garden Elective Teacher) and Kate Porterfield (Garden Committee Administrator), the garden classes and the garden itself are supporting students in developing critical thinking, collaboration, job, and other 21st century skills. Students in the Wilson Middle School garden classes and internships have presented at the Albuquerque Public Schools school garden conference, joined the NMOST network on their podcast, spoken at Farmer's Markets, and shared their produce at local farmers' markets during the harvest season.

Partnerships and remote learning invited opportunities to collaborate with partners in Albuquerque and beyond with the garden class. Students conducted Q&As with local chefs, met local small farmers who talk about market gardens and food systems, worked with the Bosque Ecosystem Monitoring Program, and learned about large-scale farms through collaboration with the Ag in the Classroom program.

RIPPLE EFFECTS

"Students come to the garden in one mood and leave in another. The space and the time outside really is impactful on how the students are feeling. They take that new mood with them to their next class. So, the time in the garden has a ripple effect on the school in that way." ~Susan Schipull

The Wildcat Blooms Garden has grown to support students through four elective classes, a growing summer internship program, and in 2021 a partnership on an afterschool internship program with the Bernalillo County Urban Ag program.

COMMUNITY INVESTMENT

Science Teacher, Mary Erwin, and the founding students had two goals in mind for the Wilson Garden; to grow food for their community and to create a unique learning environment. Students had a role in every part of the process from building healthy soil and starting a compost, digging a functional pond, planting, weeding, planting, building, and more. Now at 10 years old, Ms. Schipull and Ms. Porterfield describe the garden as a point of pride in the neighborhood. Alumni students visit and share memories of building parts of the garden and learning in the space. Neighbors regularly help keep the garden clean. Community members pass by the garden and say things to the teachers, such as "I love your garden; it's great for our neighborhood."

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MONTE VISTA ELEMENTARY

In Progress: Outdoor Classrooms - Las Cruces



STUDENT LEADERSHIP

Monte Vista Elementary School teacher Robbi Berry and her "Berry Bunch" 5th graders of the 2020-21 school year helped to draft, advocate, and testify as experts for the outdoor classroom legislation Senate Memorial 1. Working with nonprofit civic education organization Wild Friends and with the encouragement and guidance from Ms. Berry, students thrived with a projectbased approach. The project involved not only learning how government works but how to identify problems that affect the school community, develop solutions, and share those solutions with people in power. The '21-22 class is carrying on the legacy and successes of last year. Success for this outdoor classroom project is fueled by the enthusiasm and project-based focus from Ms. Berry and the students. The design process of identifying problems and developing solutions instills a sense of responsibility and boosts morale across the school community.

PROJECT-BASED LEARNING

At the start of the '21-22 school year, some of the classrooms that use portable buildings were temporarily displaced while the rooms underwent repairs. Seeing the problem of displaced teachers and students, the "Berry Bunch" took up the idea of outdoor classrooms as a viable solution for this issue and others. As they work through the project, they consider the criteria for the classrooms, such as location, access, shade, and seating. The students also consider the cost of materials and the budget for their designs.

DISTRICT-LEVEL SUPPORT

Ms. Berry and the 5th grade "Berry Bunchers" sent a letter to the superintendent of the Las Cruces Public Schools at the beginning of the school year to follow up on interest he had expressed in their outdoor classroom ideas. Ralph Ramos visited the students in their classroom just a few days later to listen to the students' well-researched proposals building from the work the class did with Wild Friends in 2020. During Mr. Ramos's visit, the students demonstrated the impact of their project-based learning, and the crosscurriculum opportunities of both the development of outdoor classrooms and the use of them. Mr. Ramos encouraged the students to keep working on the prototypes, offering to support their implementation with district funds.

COTTONWOOD CLASSICAL PREPARATORY SCHOOL

In Progress: Cross-Curricular Outdoor Classroom and Garden - Albuquerque



GETTING STARTED

With the goal of improving the school grounds and creating a space for outdoor learning to take place, Cottonwood Classical's cross-curriculum teacher, Stephen Williamson, worked with the school's Executive Director to locate a site on the school grounds for an outdoor classroom and garden. The school's construction plans require water catchment ponds for drainage, and areas of the school grounds already demonstrate a high level of rainwater storage. Using the topography of the school site, the need for the catchment ponds, and working with the school architects to orient the new construction so to maximize stormwater capture for the gardens have provided opportunities for collaboration, for teaching sustainability practices across curricular areas, and for designing a low impact, off-grid garden and classroom space.

CROSS-CURRICULUM INSTRUCTION

Sixth grade students reading The Long Walk to Water in their English classes study water during their cross-curriculum time. These students have worked with Mr. Williamson to plan the placement of terraced raised garden beds, calculate the amount of water needed for the beds, and calculate the amount of water available to make decisions on how many beds they can install. They have also made projections on how much food they can produce with the space and water, and explore possibilities and plans for distribution in relation to social issues around food supply and food insecurity.

FUNDING

Much of the planning and infrastructure investment have been **very low cost** because of the site selection and collaboration with the school architects to ensure access and opportunity for rainwater harvesting. To support needs for equipment, Mr. Williamson solicits donations from the community, resources support for compost and topsoil from APS, and writes grant proposals when time allows. The gardens and outdoor classroom are supported by the school administration but are not yet incorporated into the budget, a vital next step to ensure success and longevity for the spaces.