National Parks as Classrooms

The late Robin Winks, for many years the chair of Yale’s history department, also held the distinction of being the first person to visit every single one of the National Park System’s hundreds of sites. He called the system, “the world’s greatest outdoor university—one with over 300 branch campuses, each with a unique and compelling curriculum.”

For place-based educators across the country, Winks was highlighting what they already practice in their curriculum on a national scale. The National Park Service (NPS) offers a wealth of learning opportunities outside the classroom, but within the context of place—from historical sites and monuments to the well-known large expanses that are national parks.

The Educational Component

Because parks are designated for their national historical or natural value, each one has an educational component, the extent of which varies by park. Whether hosting school visits to the parks or developing online materials for classroom teachers, the NPS is reaching out to educators nationwide to enrich student learning with the power of place. The NPS aims to help them use public lands as classrooms where students can view historic artifacts and structures and interact with the natural world—and hopefully in the process, foster future stewardship of our nation’s most precious resources.

Education within the NPS goes beyond the typical one-day field trip to a park. Most visits are part of a larger curriculum that follows state standards and includes ranger visits to schools along with comprehensive instructional units taught before and after visits to the park. The NPS is also working on virtual park visits that any teacher from coast to coast can use. Studying the Civil War, but not close to a battlefield? Gettysburg National Military Park in Pennsylvania sponsors a live satellite-broadcast interactive field trip with classrooms across the country where students “meet” a soldier and follow him through the battle. Trying to help your students get a handle on geology, but finding that textbook too dry? Yosemite National Park has an

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FirstPerson

Which Came First: The Places or the Parks?

NPS Education Programs in Rural Alaska

“After having worked with rural Alaskan children for the last decade, one thing has become very clear to me. That is, a place-based curriculum is an essential component for success. If I hope to make a connection with these kids, and help provide meaning to their lives, I must make my teaching relevant. And to be relevant, I use the local environment as a context for learning… The local environment for the kids I work with happens to be Glacier Bay National Park and Preserve.”

—Fawn Bauer, Education Specialist, Glacier Bay National Park and Preserve

Many of the national park areas in Alaska are new to the system, established as recently as 1980 by the Alaska National Interest Lands Conservation Act (ANILCA). At that time, 10 new national parks in the state tripled the size of the National Park System. Fawn’s observation about park-based teaching in Alaska is similar to what parks with long-time educational programs in the lower 48 states accomplish, but Alaska parks, with their relative newness, face additional challenges.

The passage of ANILCA made national parks and Alaska Natives instant neighbors: many of Alaska’s rural villages are adjacent to or surrounded by the new park system and are inhabited by Alaska Native people who represent several different cultures. Today, 70 percent of Alaska Native people live in nearly 180 villages, ranging in size from 25 to 2,500 residents. Statewide, Native children account for close to 25 percent of the student population, although this figure is much higher in rural villages.

Alaska Native people, both now and for thousands of years, have used the resources of their homelands that are now designated as national parks and preserves; they are linked, historically and inextricably, with the land and resources. When we discuss rural education in Alaska today, it is virtually synonymous with the education of Alaska Native students. After ANILCA, one question became obvious: what role does the National Park Service (NPS) play in rural Alaskan education?

One educator described Alaska’s national parks as “the fabric that is woven into the tapestry” of the lives of its Native peoples. Their traditional education dealt with survival and appropriate use of local resources. Even today, Native people retain subsistence rights on parklands through the provisions of laws that they influenced strongly. The acquisition and transfer of resources—among them seals, whales, walrus, moose, beaver, wolverine, caribou, or berries and plants picked near the villages—were the economy. Today the practical use of such resources is retained, but it is combined with a cash economy introduced by Western culture. Family ties were at the heart of every community and sharing resources among the community a way of life. Teaching and learning, often through stories, passed from one generation to the next.

Rather than transport students into Alaska’s national parks, frequently our education specialists travel to schools in communities near parks—a difficult feat, given that many are still only accessible by plane or boat during the summer, or snow machine and dog sledding in the winter.

Although the NPS presence and mission are not necessarily appreciated or understood, NPS programs in schools can
serve as an icebreaker. Education specialists arrive at schools in the NPS uniform and are initially labeled as “cops.” After a few visits, they are recognized as park rangers, teachers, mentors, or friends. When these staff connect with kids, they accomplish several things. They create a positive impression of the agency in the community. They provide students with role models and present the potential for careers that would allow students to remain in their communities as adults. They address curriculum in a variety of disciplines, using parks and park resources as content. An additional benefit is that through students, NPS rural educators make connections in communities that might otherwise not occur.

Glenn Hart, the education specialist at Wrangell-St. Elias National Park and Preserve, covers an enormous territory (over 13 million acres) in the country’s largest national park. Glenn’s experiences as a National Park Service educator are typical of those of his counterparts.

In my travels to area schools, it has been my experience to lend my knowledge of what it means for kids to have a national park in their back yard, or to be surrounded by a national park.

The themes I present include a Park Service message. At the same time, they are firmly based in curriculum and usually focused on earth science, with an emphasis on place-specific examples found in the park.

Many schools have outdoor programs that fit well into the parameters of park themes. Often National Park Service-funded programs help remove students from their sterile classroom environment to the outdoors where they can fine-tune proficiencies that have been identified by elders within the community as necessary life skills. Included in these programs are subjects as diverse as animal and ecosystem awareness, Native ways of knowing as they relate to Western science, and water safety or safe winter travel. We usually adjust our teaching to respond to existing programs while including messages about conservation.

Without exception, Alaska’s national parks provide outstanding opportunities for a multi-disciplinary approach to learning. For rural Alaskan students, a sense of place is virtually inseparable from a sense of who they are.

At Glacier Bay National Park and Preserve, several education programs foster a sense of place and create opportunities for students’ self-discovery. Innovative approaches using partnerships and grants have transported elementary, middle, and high school students into Glacier Bay via boat—a rare privilege in a state where transportation costs are prohibitive. The vessel becomes a floating, moving classroom. Students study science and culture with an emphasis on the park. Through careful coordination with the schools, Glacier Bay becomes the content for interdisciplinary studies, weaving together Native studies curriculum, science content standards, and the new state standards for culturally responsive schools.

The impacts of place-based education programs like this one are often far surpassed by their extraordinary cultural significance.

Glacier Bay has been the ancestral homeland to the Huna Tlingit people for thousands of years. Until very recently, many elders had not visited the bay in decades; many kids from the village of Hoonah—nearly 20 miles away by boat—had never been to Glacier Bay. A partnership with the local school and the tribe, along with a Parks as Classrooms grant from NPS, connected and reconnected these people with their homelands. On one trip into Glacier Bay, the vessel logged over 180 miles in one day!

From these visits, students experienced a homeland they had never seen. The stories of Glacier Bay have been celebrated by their people for thousands of years. Potlatches, memorial parties, house dedications, stories, dances, and songs came alive for kids who could now connect their cultural traditions, language, and ways of life with a real place.

Compared to many place-based or “park-based” education programs in the National Park System, our programs in Alaska are in their infancy. As our educators become integral parts of both schools and communities, they are constantly learning how to best connect with students in rural settings. Much of the time, we learn more from rural students and their extended families than we teach. Perhaps that is what place-based education is all about.

This article is a collective effort by Fawn Bauer, Glenn Hart, Linda Jeschke, Diane Jung, and Joanne Welch, all of whom have a role in the National Park Service education programs in the Alaska Region.
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In a state not known for its “rural-ness”—only 11.8% of its people live in the rural areas of our country’s 11th largest state—Utah’s rural students could easily be overlooked. But children living in those areas have an urgent need for educational attention, with their high subsidized lunch eligibility rate and their exceedingly remote communities. With the NPS for 29 years, Paul Henderson says that the Canyon Country program “grew from the realization that many youth in rural southeast Utah had never visited the national park areas that literally lay within their own backyards.”

Canyon Country operates with elementary and middle schools in Grand and San Juan counties, covering such topics as geology, animal habitats, and animals of the desert. These are not your mother’s typical one-day park visits, says Henderson. “One of the keys to our success is that we never wanted this to be just a bus full of kids showing up on an unstructured field trip.”

They keep the instructor to student ratio very small (there are never more than eight or nine students in a group). Each grade’s area of concentration includes a 40+ page teacher’s guide, complete with pre- and post-trip activities and curriculum ideas. Field trips are preceded and followed by a classroom visit by a park employee. Because they go on multiple trips by the time they are in sixth grade, students often forge deep relationships with the parks’ employees and the parks themselves.

One example of their comprehensive programs is the third grade “Geological Features and Geographical Concepts” curriculum (one of three covered for that grade). Before going to Arches National Park, students learn in the classroom about compasses, topographical maps, the four cardinal directions, items to take along for a safe hike, and how to respond to being lost in the outdoors. Once at the park, participants learn how the sandstone features of the park were created and build their own model of a geologic feature. They participate in a compass course and draw topographic contour lines on a map of one of their fellow students’ body outlines before making their own maps of the features around them. Back in the classroom, students make a map of the room and write stories about a safe journey that incorporates compasses and maps.

Partnerships between the schools and the parks have yielded positive results, Henderson says. Students from Grand County schools participate in 21 activities with Canyon Country between first and sixth grades. Those from the first groups to complete the program are now in high school.

Canyonlands National Park, Utah

Canyonlands National Park preserves one of the last relatively undisturbed areas of the Colorado Plateau, with a landscape of canyons, mesas, and deep river gorges courtesy of the Colorado River and its tributaries. In its partnership with Arches National Park (the largest collection of natural stone arches in the world), Hovenweep National Monument (the site of five prehistoric, Puebloan-era villages spread over a 20-mile expanse of mesa tops and canyons) and local school districts in southeast Utah, the park offers “Canyon Country Outdoor Education.” The program is a science-based outdoor curriculum rooted in the Utah State Core Curriculum for Science Education and the National Science Education Standards.
school and competing for coveted spots in the field biology class that has students serving as instructors in the very programs from which they once learned. “About three times as many students wanted to sign up for the course as there were slots available. When we talked to some of these students, we discovered that the groundwork we had laid many years earlier had a positive influence on them,” said Henderson.

As one of the largest counties in the U.S., the pure vastness of San Juan County creates a logistical hurdle for the Canyon Country program. The town of Monticello within the county is also small, conservative, and wary of the government that brought environmental restrictions into its predominantly extractive industries. But Canyon Country has been successful there, slowly gaining credibility with parents and community members by inviting them along on trips and stressing that the program supplements what kids learn in the classroom.

Jeff Wolin, the first parks Education Specialist placed in Monticello, was voted Citizen of the Year three years ago. According to Henderson, Wolin’s energy, enthusiasm, and approach won supporters of the program. “He wasn’t trying to teach the kids what to think, but how to think. He stressed that kids should draw their own conclusions. None of our programs would go anywhere without parental support. Even those most fearful of us—if they haven’t become our supporters, they at least respect our approach.”

George Washington Birthplace National Monument, Virginia

Students visiting the 550-acre park that preserves George Washington’s birthplace can explore the family estate, cemetery, and farm that helped pave the way for a young surveyor to become our nation’s first president. The life of a colonial tobacco farmer, however, is just the beginning of the park’s educational program. Nestled beside the tidal Potomac River and part of the Chesapeake Bay ecosystem, the park’s lands include wetlands, marsh habitats, and evergreen forests, allowing the park to bring science and environmental topics to student programs as well.

Andrew Packett, the park’s Education Coordinator, says that thousands of students visit every year from all over the country, including a recent school group from Texas. “George Washington could have been king or president for life. But he chose to give the power back to the people. His greatness was not his intelligence (though highly regarded, he was not well educated), nor in his military strategies (he lost more battles than he won). His true greatness is what is within each of us—his character. He’s a wonderful role model for children…and that’s what attracts students and teachers to our educational programs,” said Packett.

The park’s curricula concentrate on enlivening the character of America’s greatest leader. Covering George Washington’s life in colonial times is not just a tour of an old home and farm with non-interactive presentations from park rangers. Teachers like that all of the park’s educational programs reflect the Virginia Standards of Learning (SOL) in history, English, computer technology, math, and science provided through intense active learning experiences. But learning through the life led by the “Father of our Country” goes beyond that.

The park’s 6th and 7th grade program, “How Math and Science Changed George Washington’s Life,” is an interdisciplinary program that uses history to teach math and science concepts. The teacher resource guide to accompany the program has in-class activities and lessons to be completed prior to visiting the park. Students also learn “science for land surveyors,” concentrating on the effects of erosion and changing landscapes. Once at the park, students take a walk in George Washington’s shoes. Just as he surveyed 22 acres in the park when he was just 15, students complete their own survey of a part of park land, learning geometry concepts and the importance of understanding the natural landscape.

Washington himself is the teacher again in the “You Can Be Like George Washington” program (targeted to grades K–5), where students gain character education by learning about how young Washington overcame obstacles such as coming from a single-parent home with a limited income and not having much access to education. Emphasizing traits such as personal responsibility and self-control, students learn how to overcome things that could be a barrier to their own successes.

Last summer, the park started a partnership with rural Washington District Elementary School, just eight miles away from Washington’s Birthplace, along with five other sites. Packett and teachers from the school developed “The Washingtons in Virginia History,” a 4th and 5th grade program based on continued on page 6
SOL requirements in Virginia state-specific history. According to Packett, student SOL scores have risen 24 percent since the program’s inception. “It’s great knowing that we are a resource for local schools,” he says.

“He’s done an excellent job making this information accessible to the students,” notes Paula Suggs, Principal of Washington District. “Sadly enough, many of our kids don’t visit the park. After participating in this program though, they have a ‘remember when’—a way to tie their hands-on experiences to the words they’re reading in their texts.”

Badlands National Park, South Dakota

There are 11,000 years of human history hidden within the sharply eroded buttes, pinnacles, and spires of Badlands National Park. But that history pales in comparison to the fossils scientists still find there that date back 23 to 35 million years. If rocks aren’t your thing, the park also has the largest, protected mixed grass prairie in the United States and is the site of the reintroduction of the black-footed ferret, the most endangered land mammal in North America. Badlands is a balance of what is ancient and what is new, a dichotomy represented in their educational programs for schools across the state.

In exceptionally sparsely populated South Dakota, Badlands, in the southwestern part of the state, is located a fair distance from most school districts, so the park reaches out to schools up to 100 miles away through their “Badlands in Your Classroom” program. Staff members present 50-minute programs to student groups that cannot make the trip on their own, traveling to rural counties and Indian reservations, among other locales.

Choosing from “Prairie Past” (fossils and geology) and “Prairie Present” (animals and plants), teachers in grades 1–8 get pre- and post-visit lesson plans to accompany the hands-on, constructive learning curricula the park staff bring with them. The programs are also

Parks Facts and Resources at a Glance

- The National Park System comprises 384 areas in nearly every state and U.S. possession.
- The National Park System encompasses approximately 83.6 million acres, of which more than 4.3 million acres remain in private ownership.
- The largest area is Wrangell-St. Elias National Park and Preserve, Alaska. At 13.2 million acres it is 16.3 percent of the entire system.
- The smallest unit in the system is Thaddeus Kosciuszko National Memorial, Pennsylvania, at one-fifth of an acre.
- Parks encompass a broad range of designations—16 in all—including “national parks” (large natural areas with a wide variety of attributes where hunting, mining and consumptive activities are not allowed), “national preserves” (similar to national parks, but hunting and consumptive activities are allowed), and “national historical park” (a site with an historical feature).
- The first national park to be designated was Yellowstone National Park in March 1872.
- Over 400 million people visit the parks every year.
- The NPS website for teachers is located at http://www.nps.gov/learn/. The http://www.nps.gov website also provides links to parks across the country, listed alphabetically or by state. Each park webpage has an “education” link; some parks provide teacher workshops and in-depth curriculum around classroom visits.
- “Parks as Classrooms®” is the nationwide program administered by the NPS with major support from the National Park Foundation and other sources to encourage hands-on learning experiences at parks for classroom teachers. Most of the NPS educational programs are funded through this effort.
- Another website from NPS is http://www2.nature.nps.gov, with a focus on science and nature information. A link from that homepage: http://www2.nature.nps.gov/synthesis/views/ provides virtual experiences online by presenting stories of the natural, historical, and cultural wonders of the United States in an educational and interactive format. The views allow people to “visit” national parks around the country, complete with photographs and virtual tours.
- “Teaching with Historic Places” at http://www.cr.nps.gov/twhp/ uses properties listed in the NPS National Register of Historic Places to enliven history, social studies, geography, civics, and other subjects. Featured lesson plans and historical events are on the homepage, but there are also various links to provide practitioners with more lesson plans, teacher development, and suggestions for using “places” in the classroom.
aligned to South Dakota Content Standards.

“From the teacher’s perspective, these programs are a chance to illustrate some of the concepts they are teaching, such as erosion, sedimentation, rock cycles, fossils, animal adaptations, and on and on…a chance to augment the curriculum,” says Julie Johndreau, the park’s Education Specialist. “From the park’s perspective, we are exposing kids to an NPS uniform and establishing a base for students to have positive feelings and an understanding of our mission. We’re hopefully fostering appreciation of this resource.”

The park also has a close relationship with a K–8 school located just two miles from park headquarters in their “Interior Adopt-A-School Program.” Johndreau presents a series of six programs to each classroom every year at Interior School, giving an in-classroom visit and presentation before taking students to the park for a field-based learning experience. “Theoretically, a student attending the school for their entire elementary career would participate in over 50 park programs,” says Johndreau. “Whenever an Interior student sees me anywhere, the first thing they ask is, ‘When is our next park day?’ ”

For one recent 2nd grade program, Johndreau first visited the classroom and introduced students to the idea of fossils by showing a slide show and then having them put together a simulated fossil skeleton puzzle. From there, the group traveled to the park, where students acted out how ancient mammals were fossilized. They then looked at fossils as they walked along a hiking trail. They measured the fossils and compared their size to the students’. After returning to the classroom, students handled different fossil casts and discussed what the animals might have looked like and how big they would have been. Says Johndreau, “The fossils tell a story to students about how mammals adapt over time. They can see animals that they can almost recognize…early horses, cats, grass grazers, etc. Teaching about evolution can be tricky. But we can expose kids to these types of things without insulting their beliefs.”

The program has been successful with Interior School, as well as the community and neighbors. Johndreau echoes sentiments voiced by Henderson in Utah. “Parents are getting involved, and they let us know that this program is working and is appreciated by them. We know that if the parents aren’t comfortable, the kids won’t be.”

Building a Lasting Relationship

These three educational programs at parks in three very different areas of the country all aim to bring the national parks into the classroom. By aligning programs with state curriculum, working with teachers based on their needs, building community support, and setting their sights on developing young people who cherish their national heritage and resources, these programs are a place-based success.

“The easy answer to why students should learn from our program would be that the state requires these subjects to be taught. The better answer is that we are attempting to help students become the next generation of leaders who will make decisions about the use of our public lands,” says Henderson.

NewsBriefs

New Organization Dedicated to Strengthening Rural America

The 80-55 Coalition for Rural America (www.8055.org) is a coalition of advocacy, research, and policy organizations working toward bringing the issues of rural America to the forefront in the minds of policymakers, key decision makers, and the American public. The Rural Trust is just one of the many partner organizations working together to identify strategies for positive change and ensure economic prosperity, increased cultural and social contributions, and the preservation of open spaces that intrinsically define “rural.” Their website is a great resource for information and news about rural America. The term 80-55 is derived from federal statistics showing that rural America represents approximately 80 percent of the nation’s landmass and is home to about 55 million Americans.

Parental Support Lacking for No Child Left Behind

A new report sponsored by the Civil Society Institute found that even with widespread (78%) parental awareness of the No Child Left Behind Act (NCLB), 34% of those parents perceive it as “punishing schools for failure instead of rewarding them for success” and 25% found it as “limiting learning by students.” The survey found that America’s parents are supportive of the concepts and goals behind NCLB, but most are against the details of how it is implemented. View the full report at http://www.resultsforamerica.org/calendar/files/RFA%20NCLB%20parents%20poll%20FINAL.pdf.

Make Your Voice Heard

In Letters to the Next President, more than 30 education experts, elected officials, practitioners, students, community leaders, and parents wrote to our next president, offering suggestions on improving critical problems in public education such as equitable funding resources and saving small schools. Now you can share your own thoughts on the future of education in this country by going to www.letterstoprez.org. A coalition of organizations, including the Rural Trust, will work on getting the letters delivered to the next president in January 2005. The book is $14.95 and is available at http://www.teacherscollegepress.com.
A Decade of Consolidation: Where are the Savings
By Cynthia Reeves Challenge West Virginia, 2003

This study proves that school consolidation in West Virginia has failed to reduce the costs of providing a thorough and efficient education to children across the state. One key finding was that between 1990 and 2000, more than 200 schools were closed and school enrollments declined by over 34,000 students, but West Virginia increased its education expenditures more than any other state in the country. Go to http://www.challengewv.org/news/decade_of_consolation.pdf for a free copy of the report.

Creating Partnerships, Bridging Worlds: Family and Community Engagement
Turning Points: Transforming Middle Schools, 2003

Based on the concept that an equal and excellent education partially hinges on including families and communities in schools, this free guide from Turning Points provides tips for developing strategies to encourage their participation. The guide is available at http://www.turningpts.org/pdf/Family.pdf.

Place-based Education: Connecting Classrooms and Communities
By David Sobel Orion Society, 2003

This book provides a comprehensive review of place-based education in the United States. From philosophy to strategy, Sobel traces its journey as a classroom tool, celebrating teachers that use it to connect classroom, community, and the environment. The book is $8 and can be ordered at http://www.oriononline.org.

Preserving Rosenwald Schools
By Mary S. Hoffschwelle National Trust for Historic Preservation, 2003

This booklet traces the history of the Rosenwald school building program, which funded the construction of almost 5,000 schools for African-Americans in the rural South between 1912 and 1932. It includes tips for identifying former schools and case studies of Rosenwald school reuse projects. $8 for non-members and $7.20 for members; available at http://www.preservationbooks.org/.