

## AMERICA'S LARGEST CLASSROOM EXPANDING THE ROLE OF EDUCATION IN OUR PARKS

# America's largest classroom: *Expanding the role of education in our parks*

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On December 10, 2016, Congress passed the National Park Service Centennial Act, which made education a mandate for the National Park Service (NPS). This was a historic moment, because for the previous hundred years the national parks were only mandated to preserve and protect America's natural and historic resources and scenery. This monumental move to include education in the NPS mission was the inspiration for our new edited volume, *America's Largest Classroom: What We Learn from Our National Parks* (Thompson and Houseal 2020).

The book project started on the back of a napkin at the Yosemite Valley Lodge in November 2016. Members of the National Park System Advisory Board's Education Committee were at their annual meeting, and that year's discussion was focused on developing a strategy to facilitate and deepen park-based learning initiatives. The Education Committee represented a diverse range of expertise, with all members working diligently to advise strategy and research about education in (and *with*) the national parks. Our team of collaborators and authors knew that the ways visitors engage with and learn at national park sites had become increasingly sophisticated and rigorously evaluated, and we wanted to tell the story of the educational impact of our national parks and public lands.

Middle school students from Cody, Wyoming, study hot springs during a visit to Orange Spring Mound, Yellowstone National Park. | ANA HOUSEAL

Today, the *largest classroom* includes 419 sites covering more than 85 million acres in every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. Every year hundreds of millions of people visit America's national parks, and millions of them engage in one of NPS's many educational programs. Place-based education programs are not only about biodiversity, geography, and the environment; many of the national park sites engage visitors in reflective lessons about America's dark history. Such programs provide an immersive, reflective learning experience, recounting the diverse stories and struggles for equality and freedom in this country. We believe these conversations are as important today as ever before.

The book is an initial effort to compile some of the latest research and evidence from leading practitioners and scholars in the fields of informal learning, place-based education, STEM (science, technology, engineering, mathematics), digital technology, and educational partnerships. This special issue of *Parks Stewardship Forum* includes two of the chapters and research included in *America's Largest Classroom*, but goes beyond this to also offer new case studies and research notes written by NPS employees and educators on topics such as climate change, partnerships in residential environmental education, and free-choice learning, among others.

We believe they showcase the best practice within the agency and illustrate the evolution of education in “America’s largest classroom.”

*America’s Largest Classroom* is organized into five sections, and we have kept the same format for this journal. In Section I, authors examine the big picture of park learning—from institutional knowledge to interpersonal perspective sharing. For this special issue, we offer a reprint of Julia Washburn’s chapter “Dynamic Learning Landscapes: The Evolution of Education in National Parks.” This piece chronologically explores the park learning movement that began over a century ago, and continues today.

Next, we offer two new pieces that parallel chapters from the Section II of the book. The first, “Feedback Loops,” explores the ecosystem of learning, through learning about ecosystems,

science, and research in national parks. Larry Perez, Andrea Delorey, Mariah Nelson, Ryan Stubblebine, and Matt Holly present field notes about a climate change education initiative that engaged fourth graders and high school students in two urban communities in Indiana and Massachusetts. The authors discuss the critical role of their partnership between the NPS Climate Change Response Program and the nonprofit No Barriers USA, in which they designed and implemented an immersive Every Kid in a Park experience with peer-to-peer, place-based learning. In the second article, Will Elder, Laura Castellini, and Oksana Shcherba tell the story of how they were able to make sea-level rise relevant for their visitors. This article details how Golden Gate National Recreation Area inspired climate change exhibit projects across the national park system. The authors provide insights into the original prototype that was developed using a seed grant



National Park System Advisory Board Education Committee members at Yosemite National Park, November 2016. Thompson and Houseal are in the middle row, second from the right and far right, respectively. | ANA HOUSEAL

from the National Parks Conservation Association in 2009. As frontrunners in climate change interpretation, this case study carefully details the creation of the exhibits, visitors' response to them, and key lessons learned.

Section III in the book focuses on "Health and Self." Following this theme, the next two articles invoke the power of parks to facilitate learning about ourselves. In their book chapter, "I Felt Like a Scientist! Accessing America's National Parks on Every Campus," Natalie Bursztyn, Richard Goode, and Colleen McDonough introduced virtual and augmented-reality field trips as a potential solution. The Grand Canyon Expedition app was designed to facilitate virtual field trips, but the authors found that it also facilitates student empowerment. For this special issue, Bursztyn presents an essay about lessons she learned from the implementation of that project and others that help readers think about the possibilities of expanding place-based education into virtual spaces. Related to the theme of Health and Self, one of us (Houseal) interviewed her mentor and friend, Ellen Petrick, who is a supervisory park ranger at Whiskeytown National Recreation Area and a 2018 recipient of the Freeman Tilden Award, NPS's highest honor for park interpreters. The article presented here is a snapshot of an in-depth interview, exploring the nuances of residential environmental education in a national park. Petrick's experience in this area spans decades. Thus, her insights about these programs allow us a peek into some of their profound effects—not only on school-aged learners, but on adults and community members who hold the Whiskeytown campus close to their hearts.

Section IV, "Partnering for Learning," is based on the premise that we need the next generation to see the value of parks, learning, and civic engagement. The book chapters in this section argue that NPS must create meaningful partnerships if it is to remain relevant for the next generation. In her chapter, "Place-based Learning Fosters Engagement and Opportunities for Innovative Partnerships," Susan Newton, who was working with the National Park Foundation (NPF) at the time, explained how partnerships are critical to reaching the next generation of citizens and park-goers. In her article for this issue,

she presents a continuum for engaging visitors and partners, and uses the federal government's Every Kid Outdoors and NPF's Open Outdoors for Kids programs as illustrations of impact. Open Outdoors for Kids was designed to overcome some of the most common barriers that prevent children and their families from visiting national parks. Newton identifies several successful examples of recent Every Kid Outdoors initiatives.

We have chosen to provide a reprint of Deb Yandala, Katie Wright, and Jesús Sánchez's chapter from *America's Largest Classroom*. They introduce us to a long-term partnership that has created long-lasting results. In "A Partnership Model of Education at Cuyahoga Valley National Park," they describe how this park in Ohio leveraged a key partnership to build an award-winning environmental education curriculum. Together, NPS and a nonprofit organization, the Conservancy for Cuyahoga Valley National Park, built the award-winning Cuyahoga Valley Environmental Education Center. And through it, they have offered education programs serving more than 10,000 youth from urban neighborhoods every year.

Finally, Section V of the book, "Strategic Intention," explores innovative approaches to deepen our understanding of park learning and practice. In their book chapter, "National Parks as Places for Free-Choice Learning," Martin Storksdieck and John Falk argue that the total economic value of a national park is almost impossible to determine. Here, they expand on these ideas, tying together the first author's initial experiences in some western national parks as a young man and his return as a father decades later. Storksdieck and Falk posit that park visitors learn about science, society, history, health, and themselves through the activities and people with whom they share their park visit. Through this personal story, the authors make the case that we should understand park-based learning not merely as isolated events of supplemental instruction and enrichment, but as integral elements of a person's lifetime learning trajectory.

Special efforts have been made to engage diverse audiences and discuss difficult issues, from race to climate change. Both the full-length book and the compilation curated for this special issue of

*Parks Stewardship Forum* provide snapshots of the boundary-spanning work that NPS, academics, and partners are leading as they collaborate to innovate and inspire lifelong learners across the country. We designed this collection for educators, learners, managers, and partners seeking a broad and deep overview of the landscape of place-based education in our national parks. It provides multiple disciplinary perspectives and methodological approaches to place-based learning scholarship and practice. The diverse case studies and perspectives illustrate key opportunities to innovate the practice of place-based learning, and we hope this collection inspires future practitioners and scholars to expand the learning field.

## Reference

Thompson, J.L., and A.K. Houseal, eds. 2020. *America's Largest Classroom: What We Learn from Our National Parks*. Berkeley, CA: University of California Press. <https://www.ucpress.edu/book/9780520340640/americas-largest-classroom>