"STEAM in the PARK" camps not only offer an immersive educational experience but also serve as a vibrant platform for educators to connect, collaborate, and create alongside like-minded peers from across the country. These camps provide a unique opportunity for educators to refresh their teaching perspectives, infuse their classrooms with new ideas, and return to their students and colleagues with renewed inspiration.

One of the most compelling aspects of "STEAM in the PARK" camps is the collaborative spirit that permeates every activity. Educators from diverse backgrounds and regions converge to share their knowledge, expertise, and teaching strategies. They engage in dynamic discussions, exchange best practices, and work together to develop innovative curriculum ideas that bridge the gap between the natural world and the classroom.

Through these collaborative experiences, educators build a rich network of professional connections that extends beyond the national parks. They form bonds with colleagues who share their passion for STEAM education and the great outdoors, creating a supportive community that continues to inspire long after the camp has concluded.

Furthermore, "STEAM in the PARK" camps encourage educators to tap into their own creativity and imagination. Whether they are designing STEAM-based activities, developing new ways to integrate the arts into science and technology, or crafting innovative teaching strategies, these camps provide the space and inspiration for educators to push the boundaries of their teaching practices.

As educators engage in hands-on experiences, explore the natural world, and collaborate with peers, they return to their schools and communities with a sense of renewal and fresh perspectives. They bring back not only a wealth of knowledge but also the enthusiasm to spark curiosity and passion in their students. Educators leave "STEAM in the PARK" experiences with new ways to inspire the next generation of learners, infusing their classrooms with the wonder of STEAM education and the appreciation for our national parks' natural wonders.

In sum, "STEAM in the PARK" experiences offer a powerful combination of professional development, collaboration, and creative exploration. Educators emerge from these experiences refreshed and invigorated, armed with innovative approaches to inspire their students and colleagues while fostering a deep connection to the natural world and the STEAM disciplines.

New River Gorge National Park and Preserve

Dragonfly Mercury Project:

- Educators will apply hands-on experience gained during the summer to facilitate environmental monitoring in the classroom.
- They will impart knowledge about mercury contamination and its impact on ecosystems, aligning with NGSS (Next Generation Science Standards: HS-ESS3-4).
- Educators will guide students in conducting their own investigations and encourage them to maintain science journals while exploring the historical significance of mercury pollution, connecting to National History Standards (NHD2).

Moth Survey:

- Educators will share their expertise in nocturnal biodiversity exploration and species identification, fostering curiosity among students.
- They will nurture an appreciation for the historical and cultural importance of moths.
- In the classroom, educators will lead students in maintaining nature journals, thus enhancing literacy skills (CCSS.ELA-LITERACY.W.K.8) and conducting moth surveys to meet NGSS standards (3-LS4-3).

Leave No Trace:

- Educators will instill eco-friendly practices and principles of preserving nature sanctuaries among their students.
- They will delve into the historical context of conservation movements and their relevance today.
- Back in the classroom, educators will inspire students to write persuasive essays, connecting with Literacy Standards (CCSS.ELA-LITERACY.W.4.1), and take on environmental stewardship, aligning with NGSS (ESS3-3).

Standup Paddle Boarding:

- Educators will draw upon their summer experiences to bring the blend of athleticism and nature into the classroom.

- They will explore the history of paddle boarding and its connection to the natural world.
- In the classroom, educators will encourage students to maintain nature journals, strengthen literacy skills (CCSS.ELA-LITERACY.W.5.3) and explore the physics behind paddleboarding, meeting NGSS standards (MS-PS2-2).

Fishing and Macro Collection:

- Educators will bring their understanding of ethical fishing and macroinvertebrate ecology into the classroom.
- They will discuss the historical significance of fishing and its ecological impact.
- In the classroom, educators will guide students in journaling about ethical fishing practices, enhancing literacy skills (CCSS.ELA-LITERACY.W.6.2), and conducting experiments related to macroinvertebrates, aligning with NGSS (4-LS1-1).

Hiking:

- Educators will champion physical well-being and environmental consciousness by sharing their experiences of traversing untouched terrains.
- They will explore the historical importance of hiking and outdoor exploration.
- In the classroom, educators will inspire students to maintain nature journals and write essays about hiking experiences, aligning with Literacy Standards (CCSS.ELA-LITERACY.W.8.3) and NGSS (MS-ESS3-3). They will also discuss trail design and engineering principles, connecting with Engineering Standards (NGSS MS-ETS1-1).

Grand Teton National Park

Cultural History:

- Educators will immerse themselves in the area's rich history, celebrating the preservation of age-old legacies in the context of sustainable community growth.
- They will gain a deep appreciation for the historical narrative of the region, enriching their teaching perspectives.
- Back in the classroom, educators will weave cultural history into their lessons, enhancing students' understanding of the past and its impact on the present (National History Standards: NHD2).

Hydrology Studies:

- Educators will explore the intricate water systems of the park, highlighting their vital role in nurturing both natural ecosystems and human habitats.
- They will acquire a comprehensive understanding of hydrology, water cycles, and environmental sustainability.
- In the classroom, educators will engage students in hydrology studies, aligning with NGSS (Next Generation Science Standards: MS-ESS2-4) and illustrating the interdependence of water systems and ecological health.

Hiking:

- Educators will tread the captivating trails of Grand Teton, fostering a deeper comprehension of the symbiotic relationship between humanity and the wild.
- They will gain insights into the local flora, fauna, and geological features.
- Educators will guide students in outdoor exploration, encouraging them to appreciate the interconnectedness of the environment and human life (NGSS: ESS3-1, LS2-7).

Grow Outside SEL (Social-Emotional Learning):

- Educators will champion personal and societal wellness, emphasizing the significance of emotional well-being in crafting balanced, sustainable communities.
- They will develop skills in fostering empathy, emotional intelligence, and interpersonal relationships.

- In the classroom, educators will integrate SEL principles into their teaching, nurturing students' emotional growth and resilience (CASEL - Collaborative for Academic, Social, and Emotional Learning: SEL Competency Framework).

Community Impact Inquiry Design:

- Educators will participate in an exhaustive exploration of the positive imprint communities can make on their environment, with a focus on eco-friendly designs and practices.
- They will gain expertise in community-based research, sustainable development, and environmental stewardship.
- Educators will inspire students to engage in community impact projects, aligning with NGSS (ESS3-3) and fostering a sense of responsibility for their surroundings.

Plant Encounters:

- Educators will engage with local plant life, understanding their role in both natural habitats and sustainable urban planning.
- They will learn to identify native species and their ecological significance.
- Back in the classroom, educators will lead students in plant encounters, connecting with NGSS (LS2-2) and fostering an appreciation for the role of plants in ecosystems and sustainable urban environments.

Assateague Island National Seashore

Crabbing:

- Educators will immerse themselves in interactive crabbing sessions, highlighting the importance of balanced and sustainable harvesting practices for these captivating crustaceans.
- They will understand the historical significance of crabbing in local culture and economy (National History Standards: NH.2).
- Back in the classroom, educators will incorporate mathematics to analyze crab population data, emphasizing responsible crabbing practices.

Surf Fishing:

- Educators will dive into the art of surf fishing, appreciating the nuances of responsible practices that ensure marine species preservation.
- They will explore the historical role of fishing in coastal communities (National History Standards: NH.1).
- In the classroom, educators will engage students in discussions involving mathematics to calculate catch limits, reinforcing the importance of sustainable fishing practices.

Macroinvertebrate Study:

- Educators will explore the microscopic world, gaining insights into the vital role of macroinvertebrates as indicators of aquatic ecosystem health.
- They will delve into the historical significance of water quality assessments and ecological monitoring (National History Standards: NH.5).
- In the classroom, educators will guide students in collecting and analyzing data related to macroinvertebrates, integrating mathematics into ecological studies.

Photography:

- Educators will channel their inner photographer, capturing the essence of Assateague Island's landscapes and its diverse inhabitants.
- They will learn about the historical development of photography and its role in documenting nature (National History Standards: NH.6).
- Back in the classroom, educators will teach students photography techniques while incorporating mathematics into photographic composition and analysis.

Dark Sky Viewing:

- Educators will lay beneath the starlit sky, learning about the consequences of urban light pollution and the significance of preserving pristine nightscapes.
- They will explore the historical importance of celestial navigation and night sky observation (National History Standards: NH.7).
- In the classroom, educators will discuss light pollution's impact on the environment and integrate mathematics into calculations related to light levels and astronomy.

Wallops NASA:

- Educators will embark on an inspiring visit to NASA's Wallops facility, connecting the dots between space exploration and the well-being of Earth's ecosystems.
- They will learn about the historical development of space exploration and its relevance to understanding Earth's environment (National History Standards: NH.8).
- Back in the classroom, educators will integrate engineering principles related to space technology and discuss the mathematical aspects of space science.

Mount Rainier National Park

Ecosystem Services:

- Educators will dive into the realm of ecosystem functions, exploring the myriad benefits they offer and the profound impacts of climate change.
- They will investigate the historical context of ecosystem services and their evolving significance.
- In the classroom, educators will guide students in conducting ecosystem assessments and analyzing environmental data, connecting with NGSS (HS-ESS3-2) and illustrating the interconnectedness of ecosystems and climate change.

Old Growth Forest Ecology:

- Educators will meander through age-old woods, absorbing the invaluable lessons they teach about carbon storage and climate stabilization.
- They will delve into the historical role of old growth forests in climate regulation.
- Back in the classroom, educators will lead students in forest ecology studies, connecting with NGSS (MS-LS2-4) and exploring the mathematical aspects of carbon storage.

Field Science Investigations:

- Educators will don their scientist hats, embarking on practical fieldwork and drawing actionable insights from environmental data.
- They will explore the historical development of field science and its impact on environmental understanding.
- In the classroom, educators will empower students to conduct field investigations, aligning with NGSS (HS-ESS2-5) and enhancing their data analysis skills.

Climate Change in Mount Rainier:

- Educators will delve into the unique challenges faced by Mount Rainier due to our changing climate, from shifting ecosystems to melting glaciers.
- They will investigate the historical climate patterns in the region and the impacts of climate change.
- Educators will engage students in climate change studies, aligning with NGSS (ESS3-5) and National History Standards, fostering an understanding of the historical context of climate fluctuations.

Water Studies:

- Educators will plunge into the park's aquatic wonders, understanding the intricate dance of water and climate and its multifaceted impacts.

- They will explore the historical importance of water studies and hydrological research.
- In the classroom, educators will guide students in water quality assessments and hydrological experiments, aligning with NGSS (MS-ESS2-4) and emphasizing the mathematical aspects of environmental science.

Redwood National Park

Old Growth Forest Studies:

- Educators will delve into the realm of ancient forests, their ecological marvels, and their crucial role in carbon sequestration.
- They will explore the historical significance of old growth forests and their contributions to climate regulation.
- In the classroom, educators will guide students in studying old growth forests, aligning with NGSS (HS-LS2-7) and emphasizing mathematical aspects related to carbon storage.

Second Growth Forest Studies:

- Educators will explore the stories of younger forests, their resilience, and their harmonious coexistence within the grander ecosystem.
- They will investigate the historical context of forest succession and adaptation.
- Back in the classroom, educators will lead students in second growth forest studies, connecting with NGSS (MS-LS2-4) and enhancing their understanding of ecological dynamics.

Yurok Tribe Session:

- Educators will engage deeply with the Yurok Tribe, unearthing tales of kinship with the redwoods and their enduring commitment to nature's preservation.
- They will explore the historical and cultural significance of indigenous perspectives on nature.
- Educators will inspire students to learn about indigenous cultures, aligning with National History Standards and fostering an appreciation for the historical context of environmental stewardship.

Banana Slug Challenge:

- Educators will embrace a delightful interactive study of the banana slug—its ecological role and the hurdles it faces in a changing climate.
- They will investigate the historical aspects of ecological research and climate impact on species.
- In the classroom, educators will guide students in banana slug studies, aligning with NGSS (MS-LS2-5) and integrating mathematical aspects of climate data analysis.

Condor Revitalization:

- Educators will soar through the inspiring chronicle of the California condor's return to its ancestral skies.
- They will delve into the historical journey of species conservation efforts.
- Back in the classroom, educators will engage students in condor studies, connecting with NGSS (HS-ESS3-4) and emphasizing mathematical aspects of population recovery.

Fern Canyon Hike:

- Educators will wander amidst verdant ferns, grasping the intricate relationships that sculpt this magical canyon.
- They will explore the historical relevance of Fern Canyon's unique ecosystem.
- In the classroom, educators will lead students in ecological studies inspired by Fern Canyon, aligning with NGSS (MS-LS2-2) and integrating mathematical aspects of ecological dynamics.

Acadia National Park

Tide Pool Study:

- Educators will unravel the mysteries of intertidal zones, understanding the crucial role of its residents in the marine food web.
- They will explore the historical significance of tide pool studies and ecological understanding.
- In the classroom, educators will guide students in conducting tide pool investigations, aligning with NGSS (MS-LS2-3) and integrating mathematical aspects of biodiversity assessments.

Invasive Green Crab Survey:

- Educators will dive into the challenges posed by the invasive green crab and the measures in place to mitigate its impacts.
- They will investigate the historical context of invasive species management and its ecological implications.
- Back in the classroom, educators will engage students in green crab surveys, connecting with NGSS (HS-ESS3-4) and emphasizing mathematical aspects of population monitoring.

Phenology Hikes:

- Educators will traverse Acadia's pathways, observing the dance of nature across seasons, guided by climate's gentle hand.
- They will explore the historical importance of phenology and climate impacts on ecosystems.
- Educators will inspire students to participate in phenology studies, aligning with NGSS (MS-LS1-5) and fostering an appreciation for the historical context of climate's influence on nature.

Dark Sky Event:

- Educators will be captivated by the celestial wonders, underscoring the need to conserve our pristine night skies.
- They will investigate the historical significance of celestial observation and its connection to cultural narratives.
- In the classroom, educators will discuss light pollution's impact on the environment and integrate mathematics into calculations related to astronomy, connecting with NGSS (ESS1-1).

Naval Observatory Stories:

- Educators will journey back in time, grasping the maritime tales of celestial navigation and the guiding stars of yesteryears.
- They will delve into the historical role of celestial navigation in seafaring.

- Back in the classroom, educators will engage students in celestial navigation studies, aligning with National History Standards and integrating mathematics into navigational calculations.

Climate Change Insights:

- Educators will understand the profound impacts of climate change on marine habitats, from surging seas to corrosive waters.
- They will explore the historical context of climate change and its consequences on coastal ecosystems.
- Educators will guide students in studying climate change impacts, aligning with NGSS (HS-ESS2-4) and integrating mathematical aspects of data analysis.

Bryce Canyon National Park

Prairie Dog Challenge:

- Educators will immerse in the fascinating realm of prairie dogs, understanding their ecosystem dynamics and associated challenges.
- They will delve into the historical and ecological context of prairie ecosystems.
- In the classroom, educators will guide students in prairie dog studies, aligning with NGSS (HS-LS2-1) and integrating mathematical aspects of population dynamics.

Hoodoo Geology Talk:

- Educators will understand the science and stories behind the park's magnificent hoodoos.
- They will explore the historical and geological significance of these unique formations.
- Back in the classroom, educators will engage students in geological studies of hoodoos, connecting with NGSS (MS-ESS2-2) and fostering an appreciation for the historical context of geological processes.

Night Sky Telescope Program:

- Educators will star gaze in Bryce Canyon's dark skies, unlocking celestial wonders in a guided session.
- They will investigate the historical importance of celestial observation and its role in scientific discovery.
- Educators will inspire students to explore astronomy, aligning with NGSS (ESS1-1) and integrating mathematical aspects of celestial navigation.

The Arrowhead: Emblem of the NPS:

- Educators will discover the legacy and mission encapsulated in the iconic Arrowhead emblem of the National Park Service.
- They will explore the historical context of the NPS and its role in preserving natural wonders.
- In the classroom, educators will engage students in discussions about park conservation, aligning with National History Standards and fostering an appreciation for the historical context of park stewardship.

Shaping Landscapes Over Time & Space:

- Educators will explore geological wonders that have sculpted Bryce Canyon's breathtaking landscapes.

- They will delve into the historical and geological aspects of landscape formation.
- Educators will guide students in geological studies of landscape evolution, aligning with NGSS (HS-ESS2-3) and integrating mathematical aspects of geological processes.

Hiking:

- Educators will venture on guided hikes, catering to all ages, delving into the park's natural splendors.
- They will gain insights into the historical significance of outdoor exploration and its role in appreciating nature.
- Back in the classroom, educators will inspire students to embrace the joys of hiking and outdoor experiences, aligning with NGSS (ESS3-1) and emphasizing the importance of physical activity and environmental awareness.

Voyageurs National Park

Ellsworth Rock Gardens:

- Educators will navigate this astonishing natural rock garden, delving into its ecological relevance and artistic perspectives.
- They will explore the historical and ecological context of rock gardens and their role in preserving biodiversity.
- In the classroom, educators will guide students in rock garden studies, aligning with NGSS (HS-LS2-7) and integrating mathematical aspects of ecological assessment.

Fishing and Foraging:

- Educators will connect deeply with nature through sustainable food sourcing, understanding the harmony between human sustenance and nature's abundance.
- They will investigate the historical context of sustainable food practices and their ecological implications.
- Back in the classroom, educators will engage students in discussions about sustainable food sourcing, aligning with NGSS (HS-ESS3-4) and fostering an appreciation for the historical context of sustainable living.

Northern Lights & Milky Way:

- Educators will experience the mesmerizing spectacle of the night sky, from the dancing auroras to the boundless Milky Way.
- They will explore the historical importance of celestial observation and its role in cultural narratives.
- Educators will inspire students to explore astronomy, aligning with NGSS (ESS1-1) and integrating mathematical aspects of celestial navigation.

Geology Studies:

- Educators will journey through the geological marvels and epochs of the park, exploring the ancient forces that sculpted this land.
- They will delve into the historical and geological aspects of landscape formation.
- In the classroom, educators will guide students in geological studies of landscape evolution, aligning with NGSS (HS-ESS2-3) and integrating mathematical aspects of geological processes.

Kayaks and Canoes:

- Educators will traverse the serene waterways of Voyageurs, understanding their role in nurturing sustainable communities.
- They will gain insights into the historical importance of water transportation and its impact on local communities.

- Back in the classroom, educators will inspire students to explore the significance of waterways, aligning with NGSS (ESS3-1) and emphasizing the importance of water conservation.

Invasive Species:

- Educators will engage in a comprehensive exploration of the challenges posed by alien species to native ecosystems.
- They will investigate the historical context of invasive species management and its ecological implications.
- Educators will guide students in invasive species studies, aligning with NGSS (MS-LS2-4) and integrating mathematical aspects of population monitoring.

Rocky Mountain National Park

Rocky Mountain Visitor Connections:

- Educators will deeply integrate with the park's ethos, its storied past, and its ecological prominence.
- They will explore the historical and cultural context of the park's significance.
- In the classroom, educators will guide students in discussions about park conservation, aligning with National History Standards and fostering an appreciation for the historical context of environmental stewardship.

Invasive Species:

- Educators will dive hands-first into understanding the perils presented by alien species and their consequential effects.
- They will investigate the historical context of invasive species management and its ecological implications.
- Back in the classroom, educators will engage students in invasive species studies, connecting with NGSS (HS-ESS3-4) and emphasizing mathematical aspects of population monitoring.

Indigenous Conversations:

- Educators will engage in profound exchanges, absorbing the wisdom of native cultures and their ancient conservation legacies.
- They will explore the historical and cultural significance of indigenous perspectives on nature.
- Educators will inspire students to learn about indigenous cultures, aligning with National History Standards and fostering an appreciation for the historical context of environmental stewardship.

Hydrology Studies:

- Educators will embark on a scientific sojourn, discovering the park's water systems and their crucial life-sustaining functions.
- They will delve into the historical and ecological aspects of water systems and their importance.
- In the classroom, educators will guide students in hydrology studies, aligning with NGSS (ESS2-4) and integrating mathematical aspects of water quality assessments.

Ecology Connection to Greenback Cutthroat Trout:

- Educators will engross themselves in the tale of this indigenous fish, its environmental importance, and the measures in place for its preservation.
- They will explore the historical and ecological context of the greenback cutthroat trout's conservation.

- Back in the classroom, educators will inspire students to learn about ecological conservation efforts, aligning with NGSS (MS-LS2-4) and fostering an appreciation for the historical context of species preservation.

Dark Sky Event: Stories of the Moon:

- Educators will bask under Rocky Mountain's immaculate night canopy, traversing interstellar marvels and timeless lunar narratives.
- They will investigate the historical importance of celestial observation and its role in cultural narratives.
- Educators will guide students in exploring astronomy, aligning with NGSS (ESS1-1) and integrating mathematical aspects of celestial navigation.

Mammoth Cave National Park

Geology Studies:

- Educators will journey through the epochs, unraveling the geological marvels that define the Mammoth Cave landscape.
- They will explore the historical and geological context of cave formations.
- In the classroom, educators will guide students in geological studies of cave formations, aligning with NGSS (HS-ESS2-1) and fostering an appreciation for the historical context of geological processes.

Dragonfly Mercury Project:

- Educators will explore how dragonflies serve as barometers of mercury contamination in aquatic ecosystems.
- They will investigate the historical context of environmental monitoring and its ecological implications.
- Back in the classroom, educators will engage students in environmental monitoring studies, connecting with NGSS (HS-ESS3-4) and emphasizing scientific literacy.

Macro Invertebrate Dip Netting:

- Educators will step into the watery realms, investigating the microorganisms that reveal the health of our water bodies.
- They will delve into the historical and ecological aspects of water quality assessments.
- Educators will guide students in macroinvertebrate studies, aligning with NGSS (MS-LS2-4) and integrating mathematical aspects of data analysis.

Historical Cave Tour:

- Educators will navigate Mammoth Cave's age-old corridors, embracing its natural splendor and human heritage.
- They will explore the historical narratives embedded within the cave's formations.
- In the classroom, educators will inspire students to learn about historical cave exploration, aligning with National History Standards and fostering an appreciation for the historical context of cave preservation.

Onyx Cave Tour:

- Educators will witness another dimension of the park's underground majesty.
- They will delve into the historical significance of cave formations.
- Back in the classroom, educators will engage students in geological studies of cave formations, connecting with NGSS (MS-ESS2-2) and emphasizing scientific literacy.

Typography Lessons:

- Educators will master the craft of typography, possibly drawing muse from the scenic surroundings.
- They will explore the historical development of typography and its role in communication.
- Educators will guide students in typography lessons, aligning with Literacy Standards (CCSS.ELA-LITERACY.W.3.6) and fostering an appreciation for the historical context of communication.

Bluegrass Music:

- Educators will relish the melodic echoes of Bluegrass, deepening their connection to the locale's cultural essence.
- They will explore the historical and cultural significance of Bluegrass music.
- In the classroom, educators will engage students in discussions about musical heritage, aligning with Music Standards (NAfME: MU:Pr4.2.6a) and fostering an appreciation for the historical context of music.

National Mall and Memorials

Monument and Memorial Tour:

- Educators will journey through the stories of iconic monuments, delving deep into their significance in the realm of social justice.
- They will explore the historical context of social justice movements and their impact on society.
- In the classroom, educators will guide students in discussions about social justice history, aligning with National History Standards and fostering an appreciation for the historical context of activism.

Ford's Theater:

- Educators will experience the intertwined essence of arts and history at this monumental site.
- They will explore the historical and cultural significance of Ford's Theater in the context of American history.
- Back in the classroom, educators will inspire students to learn about historical events through the arts, aligning with Arts Standards and fostering an appreciation for the historical context of artistic expression.

Tidal Basin Engineering Challenge:

- Educators will showcase their prowess and team spirit as they tackle real-world engineering problems.
- They will delve into the historical context of engineering solutions and their impact on society.
- Educators will guide students in engineering challenges, aligning with Engineering Standards and fostering problem-solving skills while emphasizing the importance of engineering in society.

Team Building Course:

- Educators will solidify connections and sharpen interpersonal dynamics while championing social justice.
- They will explore the historical and cultural aspects of teamwork in social justice movements.
- In the classroom, educators will engage students in team-building activities, aligning with Social Justice Education Standards and fostering collaboration skills while emphasizing the importance of unity in social justice advocacy.

Paint the Parks:

- Educators will channel their inner artists and portray nature's wonders, all while pondering themes of justice and unity.

- They will investigate the historical and cultural significance of art in conveying social justice messages.
- Educators will inspire students to create art that reflects social justice themes, aligning with Arts Standards and fostering creative expression in advocating for justice.

Poetry Slam:

- Educators will elevate their voices in a fervent expression of spoken art, shedding light on social justice, equity, and community.
- They will explore the historical and cultural aspects of spoken word poetry in addressing social issues.
- Back in the classroom, educators will guide students in poetry slams, aligning with Arts Standards and fostering the power of voice in advocating for social justice.