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Interpretive Sourcebook

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“These Kids Are Nuts!”
Tools for Working with Young Children from a Teacher-Turned-Interpreter

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Abstract
Many times, the success of a children's program is largely dependent on “how smoothly” it goes. For an interpreter to feel successful, they need to have some control over the learning environment so they can accomplish their objective. This presentation will equip interpreters with many simple and effective tools for working with young children. Topics will include: child development, age appropriateness, behavior management, streamlining the lesson, grabbing kids’ attention, and pitfalls to avoid. Participants will participate in a “what’s wrong with this?” segment to analyze and apply what they learn.

Keywords
basic needs, Maslow’s Hierarchy of Needs, fine/gross motor skills, scaffolding, Bloom's Taxonomy

Introduction
The objective of the attendee is to build a toolkit to use when working with small children. The expectation is that attendees participate in discussion, take notes, be flexible. The sequence of the presentation includes: Basic Needs, Child Development, Lesson Design, Behavior, Review.

Basic Needs, Child Development, Providing Structure & Behavior
Just like any audience, children have basic needs that you must meet. In order to reach higher levels of learning, we must provide for a child's most immediate needs first: safety, shelter, food, water, and an available restroom. Only then can you expect a child to stretch their potential and achieve the levels of “belonging, self-esteem, and self-actualization.” We use Maslow's Hierarchy of Needs as a tool to help us identify the most basic levels and to reach higher level needs.

Interpreters also have needs that must be met in order to create the best possible learning experience for others.

Children have stages of development. To be most effective, design your program with a stage of development in mind. For example, children ages 4-6 are beginning to develop fine and gross motor skills and learning to read. They have a limited ability to cooperate or solve conflicts because they operate on an egocentric level. Oftentimes, they are unable to assume another individual's perspective. In general, playtime is essential for their linguistic, emotional and social development. The types of learning best-suited for this age group include imaginative, musical, tactile and game-based activities. Finally, keep in mind that children this young are highly dependent on adults.

The next stage of development is ages 6-8. In this age group motor and spatial skills are better integrated but still developing. These kids are continuing to learn how to read. They are better able to cooperate and tend to strictly follow rules. They can also begin to recognize others’ perspectives. Playtime is still essential for development and the same types of activities are suitable for this age group as the previous one; additionally, text-based activities can work if they are simple. Finally, these children are ready to explore their independence.

The last age group is children aged 8-10. These kids have well-developed gross and motor skills so they enjoy game-based and sports-based activities. Additionally, these kids are now reading to learn and their self-esteem is greatly dependent on their ability to perform and produce. Finally, they believe that rules can be negotiated and are often thoughtful, inquisitive and independent.

The best way to approach the instruction of any age group is to create a program with structure. Primarily, lessons should follow an outline including: hook, introduction, objective, instruction, practice and conclusion. Secondarily, when one begins instructing children towards reaching an objective, scaffolding (guided practice) is pivotal for them to build enough confidence to perform on their own. Bloom’s Taxonomy is a key tool for building skills. The learning domains (from simplest to most advanced) include: recall, comprehension, application, analysis, evaluation and synthesis.

Also regarding structure, lessons should be streamlined in such a way that time is not lost herding children, repeating oneself, cleaning up messes or reacting to the children's missteps. For example, expectation guidelines, attention signals, and postponing questions are all methods of streamlining a lesson.

Children come with a variety of personalities. The expression of their behavior is one way they exhibit differences. However, all behavior is communication. When a child seems to be “acting up” there is always a reason behind it. As a temporary instructor, an interpreter will not get to the root of behavioral issues, but one can begin to address the child’s immediate needs. Some methods of correcting a distracting child include: giving him/her a task that is useful, offering a choice of actions, offering a quiet (supervised) cool-down area, and partnering them with another adult. In general, positive reinforcement is important for all children participating in your program. Some positive signals are: thumbs up, smiling, high fives, praise for thoughtful questions and answers, using first names (when possible).

Conclusion
A toolkit of simple yet effective tools can help an interpreter deliver a smooth interpretive program to children. It is critical
to keep in mind the basic needs and developmental stages of children. Also it is important to provide structure in the form of a well-organized lesson to make the most of one's short time with a group. Finally, (mis)behavior is actually communication. While an interpreter will not get to the root of behavioral issues, there are ways of addressing a child's misbehavior and reducing distractions which will prove useful to the whole group. Finally, in order to fully apply the new tools, an interpreter must analyze the mediocre choices of hypothetical interpreters and offer up improved methods of working with children.
Helping Visitors Feel Welcome and Excited

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Abstract
Visitors tell others about their experiences, either in person or on social media. We can help visitors feel welcome while taking care of their needs and motivating them to experience the facilities. We will cover the basics of customer care, how to determine what visitors want, and provide appropriate, interest-based orientations followed by an exceptional interpretive experience. This session will provide tools to accomplish these goals by using a presentation by the facilitator, role-playing, group discussions and collecting ideas from all to share with everyone who attends. The result will be satisfied customers, better reviews for your sites on social media, and more support for your facility.

Keywords
Improving customer service, determining interest, orienting visitors, roving, collecting informal feedback, evaluation, visitor experience, exceptional service

Introduction
Visitors tell others about their experiences, either in person or on social media. To earn great reviews, we must help visitors feel welcome, take care of their needs and interests, and motivate them to experience the facilities. This satisfies our customers and will increase visitation to our sites.

Why provide exceptional service?
We live in a time in history when we cannot afford to alienate and disappoint visitors to our sites. By providing poor service, public agencies may risk losing support during a time when budgets and positions that depend on those budgets are vulnerable. Private facilities must include exceptional customer care to grow and survive.

We will cover the basics of customer care. We will see how to determine what visitors want, and how to provide appropriate orientations based on their interests. We will go through the entire visitor experience to see how we improve service to exceed visitor expectations.

This session will offer tried and true tools to accomplish these goals in a presentation by the facilitator, role-playing by participants, group discussions and collecting ideas from all to share with everyone who attends. In addition, the presenter will share a long list of customer service ideas based on results from previous customer service workshops.

The result for those who attend should be more satisfied customers, more support for your facilities, and better reviews for your sites on Yelp and other social media. While at work, an important concept to remember is, visitors are not interrupting your job. Visitors are your job whether your job is interpretation, maintenance or sales. Good visitor feedback should motivate us.

Some of the topics we will cover include details of the visitor experience. Before they arrive, we can help them by making our contact information, website and help on the phone easy to access. When they arrive, we drop what we are doing, greet them with a smile, and provide an orientation based on their interest. If they have special needs or requests, we accommodate them to the greatest extent practical. On site, our interpretive experiences should respond to their interests and encourage interaction. Before they leave, we will check in with them to answer questions and provide additional information.

For this to work, we need a trained staff that enjoys their work and feels encouraged by management to support these customer service goals and ideas.

We will also talk about the importance of “random acts of exceptional customer service.” Our goal should always be to deliver service and an experience that exceeds their expectations.

Conclusion
Visitors to our sites deserve our attention and respect. Remember, our job is to serve them and help them to receive all the benefits of visiting the site, whether educational, recreational, or simply to escape their daily routines. Our visitors share their experiences and opinions with others, good or bad. We want those opinions to be the best possible, based on the quality of their experience and the service we provide.

References
Barry, Patrick, "Improving Customer Service at Interpretive Sites” National Association for Interpretation” Proceedings of the National Interpreter’s Conference, 2002 Note: This document will be made available to those attending the session.
Abstract
Relevant, hands-on experiences in science can provide meaningful ways for students and visitors to connect to park resources. Whether through curriculum-based programming, volunteerism or family programs; science methods and research can be incorporated in a variety of education and interpretation programs. During this presentation, the Education Team from Mount Rainier National Park will share best practices that can help educators & interpreters bring science into their programming in creative ways through partnerships with park and outside scientists.

Introduction
Benjamin Franklin’s words, “Tell me and I forget. Teach me and I remember. Involve me and I learn.” have been an inspiration for educators for over a hundred years. Mount Rainier National Park’s Education Team embodies this cornerstone 21st Century technique to create experiences centering on park science. The team will share how they approach science engagement through four main avenues: curriculum-based programming for students, engaging with Youth Conservation Corps and Scout groups, professional development for teachers and citizen science methodology.

Curriculum-Based Programming for Students
During the spring and fall, the Mount Rainier education team welcomes over 5,000 students into the park for curriculum-based education programs. Over the last several years, the team worked with scientists in the park to design lessons that focused on research questions. This effort ranges from the programs given by education rangers on a regular basis to larger Bioblitz events involving scientists serving as educators. The partnership between the divisions helps strengthen park education curriculum overall and gives scientists a new avenue for sharing their research and knowledge.

Engaging with Youth Conservation Corps
Each summer close to one dozen Youth Conservation Corps crews make Mount Rainier their home as they assist with trail maintenance and construction. The education team provides hands-on learning experiences for these crew members to help give participants a sense of place and better understand their surroundings. These are often in conjunction with Citizen Science projects in the park including butterfly and phenology surveys, geomorphology research, pika surveys and bird banding. Through a wide array of opportunities to engage in science during their time in the park, crew members also have the chance to explore different park science careers.

Scout Groups Sharing Science-Based Resource Conservation Messages
The long-standing relationship with Girl and Boy Scouts of America and the National Park Service lends itself nicely to partnerships for science communication. The Education Team at Mount Rainier works with numerous troops throughout the Puget Sound Region. Staff provides a Keep Wildlife Wild program and the scouts serve as wildlife ambassadors, teaching visitors about how to protect animals by properly storing and disposing of trash and food.

Professional Development for Teachers
Over the last twenty years, over five hundred teachers have learned from park staff and USGS scientists about the workings and risks of Mount Rainier, an active volcano. This partnership yielded a full curriculum guide, “Living with a Volcano in Your Backyard”, and the annual teacher workshop of the same name gives teachers the opportunity to test out activities while gaining the background knowledge they need to effectively teach about volcanism and geologic hazards in their classrooms. The seamless combination of education and science through this program has lead to many other projects including mini-workshops and an International exchange program.

Conclusion
Our human connection with the natural world is often filled with awe, mystery and beauty, Rachel Carson stated that “Those who dwell among the beauties and mysteries of the earth are never alone or weary of life.” The National Park Service is paramount in providing the space to invite these wonders. Yet parks can struggle to remain relevant and to connect with audiences leaving interpreters, educators and managers asking themselves how provide new ways to experience our National Parks.
Providing visitors with the opportunity to connect with park science allows for these experiences. Involving visitors with park science empowers the audience to not only be stewards of our parks, but cultivates life long learning. At its very core, science at is participatory and collaborative – cornerstones of 21st Century and Audience Centered interpretation. With science, you never stop exploring and Mount Rainier's education team hopes to continue to build on past successes and lessons learned to create more experiences for students, adults and families to connect with Mount Rainier in new ways.
The Struggle for “The Struggle”: Audience-Created Interpretation that Provokes

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Abstract
When is there no need for an interpreter? When the job of revealing resource meanings is handed over to educated and skilled members of the public. If we believe that visitors are sovereign, then the expressions of their points of view are too. “The Stuggle” is a great example of how giving up the stage shines a light on those who truly deserve it.

Introduction
The music and video project, “The Struggle”, was intended to inspire young people to understand the relevance of NPS civil rights sites at the National Mall and across the country to their own lives, through lyrics and a modern hip-hop sound. Interpretation does not happen in a bubble; it is influenced by countless things, most of which cannot be controlled. You are invited to hear about the process of completing this project and how the process of creation can be just as powerful a learning tool as the final product. “The Struggle” was written and produced by young, diverse artists who have developed a deep connection to the NPS through their participation in New Bedford Whaling National Historical Park’s award winning Youth Ambassador Program (YAP!). YAP! has produced a catalog of interpretive products for the NPS on diverse topics, from the whaling trade in New Bedford, to the NPS Centennial.

The Struggle for “The Struggle”
“’The Stuggle” is in many ways the final chapter of a great experiment in youth engagement. Begun almost a decade ago, YAP! sought to meet local New Bedford youth (ages 13-17) where they were by attempting to blend their interest in hip-hop with National Parks. Early on, NPS staff and park partners had to do a lot of mentoring, training, and coaching. Songs were written and videos were made. The quality of those songs and videos increased over time, as did the reputation of the program.

Over the years, the composition of youth in YAP! changed. Some members would leave, new ones would join. However, some stayed the course. For those artists, the days of mentoring, training, and coaching are over. They are now adults. They are now polished artists who are no longer practicing a craft, they are defining it. The members of YAP! are still rapping and still exploring their National Parks, but now they pull no punches and demand to have their voices heard.

“The Struggle” is an anthem. Not just for the artists, but for the craft of interpretation. For it demonstrates the power of the peoples ability to interpret for themselves the richness of the sites we help protect.

Conclusion
There is nothing more powerful than the direct voice and perspectives of those living in our world today. When those voices want to be heard, it is our job to give them the mic and listen.
Diversity to Equity: Shifting the way interpreters think

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Abstract
Society in the U.S. is changing and becoming more diverse. How do interpreters on the ground respond to visitors of previously under-represented demographics? It is not enough to just have a diverse audience. As interpreters, we must create an equitable experience for all – being very intentional about how we set up our programs or design our spaces. The first step is creating a culture of equity and cultural responsiveness among interpreters.

Introduction
The United States is seeing a rapid demographic shift. A growing number of residents are foreign-born and/or non-white; if the trend continues, there will be no one racial or ethnic majority in this country by 2055 or sooner. Increasing percentages of the population speak a language other than English at home. The proportion of people who identify as LGBTQ is also increasing. More people are being diagnosed with disabilities, and as the Americans with Disabilities Act has recently been interpreted broadly by the courts, more people expect accommodations for their disabilities.

However, many interpretive sites have not seen a corresponding uptick in diversity among visitors. Approximately 78% of visitors to U.S. national parks in 2015 were white. A common response among museums, parks, and other interpretive sites is to implement “diversity initiatives.” These initiatives are aimed at increasing the diversity of visitors to match the demographics of the community or of the nation at large. While getting those visitors through the gate is an important first step, our work cannot stop there.

Creating A Welcoming and Responsive Site
Traditionally under-represented or minoritized communities often do not have an established relationship with interpretive sites, or even have a distrustful relationship. There are a myriad of reasons for this, both structural and immediate. Many people of color, especially African-Americans, have negative associations with the outdoors and/or history due to historic oppression. The racial gap in education attainment can also contribute to visitors’ lack of interest in certain sites. Minoritized communities often do not see themselves represented in the stories told at our sites, nor in the people doing the storytelling. Sites may not be accessible to visitors with disabilities or who are not fluent in English. Intentionally or not, our sites send out signals about what type of visitor is welcome or unwelcome.

In order for our organizations to build long-term relationships with diverse communities, we need to do internal work. We must learn to be culturally responsive interpreters and culturally responsive organizations.

At The Museum of Flight in Seattle, Washington, education staff have undertaken a variety of initiatives to increase personal and organizational cultural responsiveness. We’ll discuss what was effective and less effective, and model some tactics we’ve learned along the way. Participants in this session will join in reflective activities and interactive discussions to address issues of oppression, cultural responsiveness, and equity, and gain some strategies for implementation in your own interpretive practice.

Conclusion
In the words of Wendy Ng, Sylas Marcus Ware, and Alyssa Greenberg, “Without an anti-oppressive framework, [interpretation] is at best upholding a vacant notion of diversity and at worst actively re-inscribing and perpetuating privilege.” Building cultural responsiveness in the organization helps to dismantle systems of oppression and create a more equitable and meaningful experience for staff, volunteers, and visitors alike.

References


What’s Story Got to Do With It?

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Abstract
We remember stories much better than we remember facts, but stories are more than a fact-carrying device. They are a fundamental part of being human—literally, story is the language of the brain. Stories provide context and meaning. Through the power of story, we emotionally engage our audiences, enrich their experiences and their lives, and persuade them to actions both great and small. In this session, we explore the mystery and promise of story, aspects of story that help us make sense of what we hope to communicate, and some specific writing techniques to help convert chaos into clarity.

Keywords
story, communication, writing, interpretive writing, creativity, interpretive story, story structure, theme

Introduction
What makes an “interpretive story,” a story? Why is “story” so important? And how do we convert what we know into effective and powerful stories for our readers and visitors?

Power, Mystery, and Impact
We remember stories much better than we remember specific facts, even if those facts are linked. (We remember the story of baby sea turtles scrambling across the sand—including details about their physical appearance, nesting, life cycle, ecosystem, and people’s involvement—better than we do a simple list of those details.) Why? And how can we apply “story” to create more effective and powerful interpretation?

Stories are more than an entertaining fact-carrying device. Our brains are continually hunting for the answer to an important survival question: Will it hurt me, or will it help me? Stories provide the answer. They provide context and meaning, codifying important and complex information, which is revealed through the characters and their conflicts.

When we strive to emotionally engage an audience, enrich their experiences and their lives, and persuade them to actions both great and small, we are tapping into the power of story.

Writing skill affects the quality of a story, of course, but writing talent itself isn’t the defining element. The defining element is the “so what” factor, which underlies the story and allows the reader to evaluate the meaning of the story’s events. It tells the reader what the story is about. There’s a big question that underlies every story; the “story question” translates to the main character’s goal. In many ways, this is analogous to an interpretive theme.

Instinctively, we know this: we expect every bit of what we’re reading or hearing to move us closer to the answer. When a story is packed with stuff that the reader doesn’t need to know, it isn’t a story; no matter how beautifully crafted the language; it’s just a collection of things that happen. This results in a meander that lacks focus and often isn’t about anything at all. In interpretive stories, it often shows up as extensive fact lists, irrelevant or disconnected content, or interpretation that feels “flat,” boring, or otherwise emotionally unengaging.

Theme alone, whether we’re talking about a literary theme (what the story says about human nature) or an interpretive theme (the central message we hope to communicate), isn’t a story in and of itself. Theme is where the “universal”—the feeling, emotion, or truth that resonates with us all—resides, but we have to get “universal” into the story in a way that is accessible to and connects with our reader. We don’t hit our reader over the head with our theme; the theme is revealed through what happens in the story. It’s implied, not stated outright.

In the story itself, there is a point (another way to think of “theme”), a problem, and a character who struggles to solve the problem. These three elements, combined with specific, relevant detail, create the emotional impact our brains crave.

Emotional impact is crucial to the power of a story. The way to get emotional impact is through specific details—what I call “electric details.” The specific details you choose to include will generate an emotional response in your reader or audience member. Emotions trigger a physical response—our hearts beat faster, our faces flush a bit, our breathing is shallow when we’re angry. Our hearts beat faster, our faces flush, and we belly laugh when something strikes us as hilarious. The stronger the physical arousal, the more likely we are to act as a result of the story, from sharing it with friends or on social media to helping with post-program clean-up or donating money.

Let’s experiment with these ideas and see where they take us today.

Note: This session included three writing exercises. The concepts behind the exercises are included here. For details on the exercises themselves, please contact Judy at judyb@greenfire-creative.com.

Object Identification
Every story begins with a mystery. We expect something to happen; exactly what is a surprise. If it isn’t, the story is less satisfying. Surprises reinforce our need to know what happens next. Surprises also increase dopamine levels in our brains—the same thing that happens when we fall in love. This combination keeps us engaged and makes the story’s content more memorable.
**Electric Lemons**

In *Wired for Story*, Lisa Cron notes that, “The universal is a portal that allows us to climb into the skin of characters completely different from us and miraculously feel what they feel.” But this only works when the universal is embodied in the very specific. In the abstract, universals—love, war, and so on—are so vast, it's impossible to wrap our minds around them. The same is true for huge numbers and other abstractions. Our brains are lazy; they don't want to do the hard work of imagining what “love” is or what “ten thousand killed in this disaster” means. Our brains thrive on specifics—the electric details, the ones that “zing.”

**Awe and Outrage**

In *Contagious*, author and researcher Jonah Berger reports that people shared science stories because the stories triggered a sense of awe. Stories that evoked “high arousal” emotions—anger or hilarity, for example—were shared more widely than those that evoked “low arousal” emotions, such as contentment. Interpretive stories are meant to “provoke”—we want our audiences to feel, think about, and act as a result of the story. Awe frequently involves a sense of surprise, unexpectedness, and mystery—those same emotions we are wired to search for in every story. And the way to evoke awe or other high-arousal emotions? Specific detail.

**Conclusion**

Story is our brain's way of making sense of the world. Incorporating known story creation techniques into our interpretive writing and program development enhances our ability to create interpretive programs that are powerful, effective, and memorable.

**References**


Bouncing Bats: Interpretive Inspiration from Our Flying Friend

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Batty Intro
As the sun sets upon the day, the nighttime critters wake up for their nightly routines. Focusing on our nocturnal friend the bat, this session takes a deeper look into the mysterious world of our only flying mammal. Over 1,200 species of bats are found throughout the world ranging in size of a dime to over six feet in length. Playing vital roles in seed dispersion, pollination and pest control, this nighttime flyer is truly a friend for all.

Batty Details
Below are some batty details to help you develop a well-rounded bat program:

Creative Crafts
- Create coffee filter bats. Using a single coffee filter, have guests' color filter, fold in half then begin pinching in the center to create a bow. Place center of pinched coffee filter into a clothespin, which will be the body. The folded coffee filter creates a pointed-winged look, similar to a bat. You can add chenille craft pipe cleaners to make ears and googily eyes for cuteness.

Display Array
- Bones (skeletons, skulls), pseudo scat replica, books (children's books, research books), puppets, replica toys
- Felt cutouts of the different bat sizes from around the world
- Place coins that weigh the correct size for specific bats in a clear baggie along with a corresponding photo of the bat
- Display cards with fun facts about bats around your staging area during staging period of program

Games on the Go
- Bat and Moth
  - Similar to Marco Polo played in a swimming pool, this game uses "echolocation" for a bat to find its prey, the moth. Please view Joseph Cornell's Sharing Nature with Children for game details.

- True or False
  - Using the fact cards placed around the staging area, have the group stand in the middle of an area and state or restate in an incorrect way facts about bats. Each person will "fly" to the left or right based on what they feel is a correct response. This will get the group moving in a dynamic fashion before the actual viewing of bats.

Batty Conclusion
While a bat program seems ideal to present at night, you can highlight the joys of our nocturnal friends just as easily during the day. With creative props and engaging activities, you can help share the beautiful world of bats with your audience. It is important to keep in balance the cute with the mysterious and the serious side of bats such as White-nosed Syndrome, not handling found bats and the batty myths. Each person can help lend a helping hand to our flying friend.

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Second Star to the Right: Developing Interpretive Plans that Guide the Way

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Abstract
Developing interpretive master plans can be a daunting activity, but the benefits are immense. Like a good map, interpretive plans guide the way to success, creating more meaningful experiences for visitors and providing a clear path for effective interpretation. Interpretive plans answer three important questions: Why is interpretation being done based on the mission of the site? Who are the visitors and what are they seeking? What are the significant resources being interpreted? The answers to these questions can inform the development of interpretive themes that unify and guide interpretive media and programs.

Introduction
Effective interpretive master plans, based on a site's resources, provide a map for developing thematic media and programs. Interpretive planning can be a daunting activity for interpreters whose schedules are already filled with many different duties.

Yet, the benefits of an effective plan are immense, leading to more meaningful and significant experiences for visitors, more efficiencies for interpreters, and ultimately more public support. Like a good map, an interpretive plan guides interpreters on a path to success.

An interpretive master plan serves many purposes. The master plan:

- Documents the entire planning process, from vision to conceptual design
- Guides development that enhances a visitor's experience
- Serves as a program for architects, exhibit firms, and other fabrication companies
- Serves as a communication tool for citizens and decision-makers to review and comment on development
- Serves as a fundraising and support tool, with full-color visuals and concise writing being important
- May be required for certain improvement and development grants

Planning is a process of developing consensus, of achieving a shared perspective by all stakeholders of why interpretation is needed, who it will serve, and what significant stories it will tell. The basic elements of a successful interpretive plan are based on the foundational questions of "Why?, "Who?", and "What?", using the answers to those questions to develop a thematic interpretive framework that will guide program and media development.

Why? Mission
It is important as part of a master planning process to develop a thorough understanding of the written mission of the site and the relationships between partners. Planners also should investigate and take into account unstated and secondary goals and purposes. Planners can better understand the mission by analyzing written documentation, such as stated mission and vision statements and goals.

Who? Visitors
An interpretive master plan should identify the target audiences for interpretation. Who are the current visitors? Who are the potential visitors a site wants to target? Why are people coming to this place? What do they want to know more about? How do things look from different perspectives? A master planning process should uncover what visitors are seeking, which may not necessarily be the same as what interpreters want to tell them.

Planners can better understand visitors by reviewing existing data, such as census data, school enrollments, tourism studies, highway counts, and other research. Even better is to ask them what they are seeking. Interviews, focus groups, questionnaires, surveys, and community meetings are a few ways a planner can get to know how and why visitors interact with a site.
What? Resources
An interpretive plan should identify the significant interpretive features and human resources of the site. The plan should assess the site based on tangibles (physical characteristics, facts, information) and intangibles/universal concepts (stories, concepts, ideas, abstractions, values). It should describe the stories that can be told about a place.

A plan can document a site’s resources and their interpretive potential through research of existing documentation. Libraries are a great resource. Planners should interview site managers, residents, and resource experts and host community meetings. Planners should immerse themselves in the site and get to know it intimately.

Organizing Resources into Themes
Once these three questions are answered – Why? Who? and What? – planners can begin to make sense of the resources, stories, and meanings that make a site unique. They can begin to understand a site’s sense of place.

Using the invariably lengthy list of resources at a site, planners can begin to develop interpretive themes. A theme is the important idea that organizes the stories of a site into a meaningful whole.

An interpretive master plan should hinge on a primary theme. The primary theme is the big, overarching idea for interpreting the site. The primary theme should be one complete, concise sentence and should connect tangibles to intangibles and universal concepts. For example, a primary theme was developed for a master plan for the Great River Road Visitor Center in Prescott, Wisconsin: “Prescott, a classic River Town and gateway to the Great River Road, is a gathering place where rivers, wildlife, and people blend into a dynamic living community rich in history and grand scenery.”

This big idea becomes more workable by splitting it into several sub-themes. For the Prescott example, a natural history sub-theme was developed: “The Mississippi and St. Croix Rivers are ribbons of life for people, plants, and animals.”

Each of these sub-themes will have several messages that nest underneath it. These messages are the specific stories and interpretation that can be used on interpretive media such as indoor exhibits, wayside panels, brochures, and multimedia such as apps. For the Prescott center, the “ribbons of life” sub-theme’s messages focused on the importance of the Mississippi River as a migration corridor and the prevalence of bald eagles at the park. These specific messages were used on interior and wayside exhibits.

Conclusion
The final interpretive master plan document should be a comprehensive, visual document that describes the planning process and illustrates interpretive media concepts. The planning process should foster stakeholder buy-in and support, ideally leading from the planning and concept phase to well-executed interpretive media and programs that help visitors find meaning in important objects, places, and landscapes.

References
Gaining Visitor Compliance:
Turning Behavioral Challenges into
Opportunities

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Interpreters learn that ‘every interaction is an interpretive opportunity’. It’s easy to apply this in positive or neutral situations, yet many of us revert to traditional methods of enforcement when it comes to thwarting unwanted behaviors. In these instances, interpretation can be our most powerful tool. Helping your visitors to make emotional connections to your site can diffuse a volatile situation and often has a stronger and longer lasting impact.

The Interpretive Opportunity Continuum illustrates the stages that a visitor may experience at an interpretive site—from simple curiosity, stair-stepping to the higher levels of stewardship. Used in situations where a change in behavior is warranted, interpretation can be effective on a broader and more permanent scale. A security guard, for example, who uses the authority of force may elicit compliance temporarily through intimidation, but one who uses the authority of the resource may see long-term effects and even create stewards.

Resources

How to get “Every Kid in a Park” and Build Meaningful Community Engagement

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Abstract  
In just two years, Everglades National Park more than doubled the number of 4th grade students coming to the park on curriculum-based programs. Find out how the park addressed the increasing demand for in-park programming and recruited a new corps of dedicated volunteers from the local community. In collaboration with teachers, the education team developed hands-on learning stations that were facilitated by volunteers. One park volunteer recruited an initial 25 volunteers, which grew to over 50 in the second year. Learn about the challenges and best practices employed in building this replicable model, as well as the benefits the volunteers discovered.

Keywords  
Education, environmental education, place-based learning, national parks, experiential learning, diversity, volunteers, community engagement, curriculum-based

Introduction  
In our professions, we are constantly faced with the challenge to do more, often with less. Whether it is the latest initiative or finding ways to reach more students, offer more programs, or increase the diversity, the demand is there. Every once in a while though, the planets align and it becomes possible to expand or experiment with a new model.

Every Kid in a Park  
For the 2015-16 school year, Everglades National Park’s long-standing education program had grown in demand to the point where we received twice as many program requests as we could fill for the 4th grade curriculum-based park programs. With both the Every Kid in a Park presidential initiative and the National Park Service’s Centennial at that time, the park’s education team decided to explore how we could accommodate the local schools from our diverse South Florida community who were eager to bring their students to the park.

Using models of field-based stations that we had employed for Junior Ranger Day and other large group events, the education team began creating lesson plans and content kits for different key topics. Meanwhile, long-time park volunteer Ellen Siegel reached out to her own contacts and recruited 25 new volunteers. Instead of asking volunteers to lead three-hour tours in a new environment, we made it more digestible and asked volunteers to use the lesson plans, background information, and props, to present on that topic for just 10 minutes to 10 students at a time, up to 10 times in one day. We sought out volunteers willing to commit to one half-day per week. By the second year, we had trained over 50 volunteers. Since we were able to offer the program three days per week at two locations, we essentially needed a minimum of 30 volunteers per week and ideally 42.

Our education team, including our returning seasonal staff, consulted with our 4th grade teachers to develop the lesson plans and gather the background knowledge and props. We modeled the presentations at the required training and also created training videos for volunteers to review as they were preparing. We created shared calendars online for volunteers to sign up and select dates and topics to present. Finally, we held webinars and in-park workshops to train teachers about the new program format.

In the first year, we were able to completely eliminate the backlog of schools on the waiting list for in-park 4th grade programs. By the second year, we had more than doubled the number of 4th graders to 8,900 students. Before the Every Kid in a Park program, the park was reaching approximately 15% of the 4th grade students in Miami-Dade County. After two years of Every Kid in a Park, we jumped to 33% of 4th graders from the 4th largest public school district in the country.

After the first year of the program, the Department of the Interior invited Miami and the Everglades to apply for a Focus Cities grant from the National Park Foundation. In the second year, the park was able to continue the pilot program and expand it with significant funding. Through our efforts and the grant funding, the National Park Service also expanded education programming at Biscayne National Park.

One of the unexpected benefits of our Every Kid in a Park program was the newfound connection with individuals from our community who are passionate about the Everglades and want to share that with children. These individuals have demonstrated a firm commitment to the Everglades Every Kid in a Park program. The park has continued to nurture that commitment through regular contact, volunteer recognition, and training.

The Everglades Every Kid in a Park program recently received the National George and Helen Hartzog Volunteer Program Award and the Southeast Regional Achieving Relevancy in Interpretation Award. It has truly been a collaborative effort between park staff, volunteers, teachers, and partners.
Conclusion
This model of using volunteers to facilitate learning is both scalable and replicable. Everglades National Park is now exploring how to expand this format to our local partners at the zoo and botanical garden. The benefits to the students are obvious, but the contributions of the volunteers to the program and staff are significant too. Most of all, however, the engagement with dedicated individuals from our local community may turn out to be the most successful part of this program.
Wood Chips, Metal Shards and Beads: How Alaska Native Demonstrating Artists Create Authentic Connections with Park Visitors

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Abstract
Established in 1962, the Southeast Alaska Indian Cultural Center (today the Demonstration Arts Program) provides opportunities for tribal citizens to interpret Southeast Alaska Native culture at Sitka National Historical Park. In addition to providing authentic interpretation for park visitors, winter programming and workshops provide opportunities for the Tlingit people to preserve and perpetuate their traditional cultural heritage through the arts (Antonson and Hanable, 1987).

Introduction
For more than five decades the sounds of adze tools carving cedar, traditional Native songs punctuated by firm and rhythmic drum beats and voices deep in conversation have resonated from the Cultural Center Studios within the Visitor Center at Sitka National Historical Park. Established in 1962, and put into practice in July of 1965, Sitka National Monument (today Sitka National Historical Park) in partnership with the Alaska Native Brotherhood (ANB) (and later other Alaska Native organizations) established studio space for Native artists to practice their artistic craft, pass their cultural heritage from one generation to the next, and share their cultural with visitors from all around the world. This program, and the individuals that have spearheaded its success, have had a profound and long lasting impact on the community of Sitka and park visitors to this remote Southeast Alaska island community.

Wood Chips, Metal Shards and Beads
The organization and facilitation of the Demonstration Arts Program has evolved greatly over the years, however even with the changes, the mission and goals of the preservation and perpetuation of traditional Native art and culture persists. Today, a partnership between Sitka National Historical Park and the Sitka Tribe of Alaska (STA) is the organizational structure that facilitates this program. Artists, as tribal employees for STA, demonstrate throughout the summer months when visitation is at its peak. During the winter months, the traditional time for the creation of cultural artwork, elders, cultural educators, artists and culture bearers provide enriching and immersive programs for community members. This partnership strengthens the bonds between the National Park Service and the local tribal government while also connecting tribal citizens and community members to the park.

The impact on community members as a result of the work that has gone on within the Cultural Center Studios is one of many enduring legacies of this program. From its inception, this location has served as a gathering place for the community. Native leaders, world-renowned artists and eager students have and continue to gather in the studios to learn about traditional Native artwork and culture. Students and apprentices learn to intricately engrave copper and silver bracelets. Carvers sculpt wooden objects into bowls and totem poles that symbolize their cultural heritage. Weavers refine their techniques to weave as their ancestors have done for thousands of year. These formative experiences for community members have provided opportunities for Native people to connect with their culture and locals to learn about and appreciate Northwest Coast Native culture. These opportunities have also helped train the next generation of artists, assisting eager young artists to learn their craft, and for some to eventually work in the studios they grew up learning in.

The impacts that the artists and culture bearers have had spread much farther than the local Sitka community. Visitors from all over the world have had enriched experiences interacting with artists at the park as a result of this program. By stepping into the studios, adorned with artwork created by former and current artists, visitors are able to learn about Southeast Alaska Native culture from the experts themselves. This experience, as highlighted by the park’s annual survey results, is the most meaningful and enriching experience for park visitors on an annual basis. The authentic interactions, and cultural exchange that occurs, allows for visitors to leave the park with a greater understanding and appreciation for this living and vibrant culture.

Youth today, as they have for decades, benefit from this program during the winter months by being able to take after school programs with cultural educators, elders, culture bearers and artists. For example, workshops where youth learned about the cultural importance of copper tinás, octopus bags and beaded vests took place during the winter of 2016/17. During these workshops, youth created their own pieces of art. At the end of the year celebration for the Sitka Native Education Program, participants danced their newly completed vests, and proudly wore their octopus bags and tinás. This program continued the legacy of their ancestors, and is helping to ensure that the next generation of Native youth is able to learn about their rich cultural heritage from today’s Native leaders.

Conclusion
The Demonstration Arts Program at Sitka National Historical Park continues the legacy of cultural preservation, immersion and sharing through a cooperative agreement between the National Park Service and tribal entities like the Sitka Tribe of Alaska and Sitka Native Education Program. These authentic opportunities enrich the experiences of park visitors, and help the park serve as a place where Native people can pass their cultural heritage from one generation to the next.
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Exploring the techniques and craft of Interpretation

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Abstract
I believe that establishing an interconnection between self and the individual visitor in any given venue is a vital component of interpretation. Through interpretation of our collective human existence, we can develop a more comprehensive understanding of ourselves and that of our fellow humans. By using self-evaluation and observations of others led to the hypothesis that all humans have a unique set of intelligences and learning styles. It was only later in life; I stumbled across Dr. Howard Gardner’s theory of multiple intelligences and the corresponding learning styles presented by Neil D. Fleming.

I then formulated the idea, that in order to establish an interconnection with each visitor, I would need to reach out and touch at least one aspect of each individual’s intelligences and learning styles to accomplish the task. I then became ready and able to provide worthy interpretation to the public.

Introduction
Eugene Carroll has been doing interpretation for over 14 years. He has traveled from Ridgefield Washington to be with us today in beautiful Spokane Washington. The objective of his presentation today is to help develop and mentor a new cadre of NAI interpreters. He truly believes in Succession planning.

Eugene volunteers with the National Park Services at the historical site of Fort Vancouver, in Vancouver Washington. The site was established by the Hudson’s Bay Company in 1825, creating the Columbia District, renowned for their fur trade.

He also is a docent with the Department of Fish and Wildlife at the site of the Cathlapotle Plankhouse, a modern representation of one of fourteen houses of the historical Chinook Indian village known as Cathlapotle, in Ridgefield Washington.

Exploring the techniques and craft of Interpretation
Together we will explore two basic components and or strategies that I consider integral to interpretation. We will develop a basic understanding of the complex set of the nine intelligences and the four learning styles that each visitor brings to the venue. We too need the same understanding of how the intelligences and learning styles play out within ourselves.

There is always the necessity, to have a well-rounded understanding of the subject material you are about to present. Conversely, when new to the field of interpretation, not having a well-rounded understanding of the subject material should not prevent you from giving a presentation. In fact you can utilize the lack of that same understanding by invoking the collective knowledge of the visitors.

Utilizing what we will learn today about the intelligences and learning styles, we can quickly learn techniques that will draw out the visitor, and invoke engagement in the presentations.

Now we can move forward in developing of our own presentations by utilizing what we have learned from the visitors and blending it with our understanding of the subject material, thereby advancing our own knowledge of the subject material.

When developing a presentation, I always try to reach out and touch each visitor through their own unique set of intelligences and the corresponding learning styles, thereby establishing the interconnection with each visitor resulting in a stellar presentation.

Conclusion
Within each presenter, there is the desire to possess expert knowledge of the subject material you are about to present. In some cases, having an “expert” knowledge of the subject can be a hindrance to good interpretation. Invariably, in each group of visitors, there will be someone challenging your facts. Try not to open any doors that divert you from the substance of your presentation.

There will always be challenges in presentations, therein lies the opportunity to practice variations of your presentation. Why variations? Because in each new group of visitors you will encounter different physical and environment circumstances, people of all ages, cultural diversity, intelligences, and learning styles. Please be flexible.

As you move forward in your personal growth and move into a professional or volunteer career as an interpreter you will now be armed with a good set of techniques and strategies. There will be no reason for you to grow stale in your presentations.

Hopefully you will find Interpretation an exciting and joyful craft.

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Leave No Trace: Teach it in your Front Country, so they can take it to the Back Country

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Abstract  
Outdoor ethics are no longer common knowledge and we must provide guidelines for people who are seeking to venture outside. Every naturalist and interpreter can, and needs to incorporate Leave No Trace into every program at every park and facility. Learn how to teach and share Leave No Trace ethics through games and role playing.

Keywords  
Leave No Trace, ethics, back country, front country, authority of the resource

Introduction  
The idea that if we can just get people to love the outdoors is not enough. On both a national and local level people are loving the parks to death. As naturalists and interpreters, we must provide outdoor ethic guidelines for people who are out in our parks. Leave No Trace provides these guidelines which we can utilize and share with the public. Leave No Trace is not just for backpackers, it is for the public and our coworkers too.

Leave No Trace  
Learn through games and role playing on how to take the Leave No Trace ethics and share them with your coworkers, administrators, rangers and park patrons. Various case studies on utilizing these ethics will be presented including public programming, school education, park maintenance duties, and everyday use. By the end of this session, you will have the tools to apply these guidelines and I challenge you to do the same. Imagine what a difference we could make if everyone was using the same message, Leave No Trace.

Conclusion  
Leave No Trace is not just something to be utilized by backpackers in the back country. These ethics can and should be taught and used in all environments. Learn how to bring Leave No Trace to your workplace in the front country so people can take the same framework of ethics to the backcountry. Leave No Trace works everywhere you go!

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Climate Change: What Are My Resources?

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Abstract
Dr. Mark Wourms, Bernheim Arboretum (Kentucky) Research Forest Director stated at the 2017 Sunny Southeast regional conference, “Science, not silence.” Participants in this session will explore the science of climate change, a sometimes contentious topic by politicians and the voting public. We will review existing and cached resources, adding to a grassroots collection of resources to “illuminate” what could be a difficult topic for interpreters. The presenter believes we should not be silent; we can interpret “climate change”.

Introduction
Interpreting climate change with the public affects us all, especially if we are employed in the fields of natural resources, environment, energy, military, or land management. Despite political biases, we can build a portfolio of resources and learn ways of approaching climate change, rather than avoiding or dismissing the topic.

Resources for interpreting climate change
The current administration has significantly changed resources through the federal government, making the task of gathering reliable information difficult for us interpreting climate change impacts. However, there is good news: other resources are available! We will also visit other topics that address the impacts of climate change: resilience planning, disaster risk reduction.

We will develop a common working definition of climate change and associated characteristics.

We will review existing and cached resources, including websites, organizations, and other sources shared by the participants, so bring your most trusted resources with you. You will receive a spreadsheet of the resources (websites, subject matter experts, documents, organizations) as a follow-up to the conference.

Conclusion
What is believed by many to be a fact, our human impact has accelerated climate change, is not accepted by all. Letters to the editor, legislative discussions, governmental budget and planning are all examples of the topic that we hear daily, both in support of and denial of our impact on climate change. Let us be illuminators on this contentious topic. As Jay Miller stated in the March/April 2017, Volume 28, Number 2 Legacy, the Magazine of the National Association for Interpretation, “Ensure you are someone who can be trusted to tell the whole story.”
CIG Turning Loss Into Gain

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Abstract
The Roving Naturalist program was started in 2002 with the purpose of engaging Brookfield Zoo guests in a variety of ways during the summer seasons. Roving Naturalists are seasonal interpreters whose primary responsibility is front-line interpretation of wildlife and nature on grounds at Brookfield Zoo. Due to cuts, the 2016 budget for seasonal staff was lost, putting these important guest engagement experiences in jeopardy.

However, in 2016, we were able to increase guest experience in the park by refocusing the goals and objectives of the Roving Naturalist program. Appropriately using the Certified Guide course, we also increased our earned revenue projections by providing a capacity building program for students.

Keywords
budget cuts, interpretive programs, CIG, Roving Naturalists, Brookfield Zoo, front-line interpretation, loss, gain, budget

Introduction
Many of us are experiencing the effects budget cuts have on the ability to conduct meaningful guest interactions at our sites. When these cuts affect our interpretive programs by eliminating guest experience positions, what are we to do? This is a question we had to answer at Brookfield Zoo in 2016 and the Certified Interpretive Guide course was the key.

The Roving Naturalist program was started in 2002 with the purpose of engaging Brookfield Zoo guests in a variety of ways during the summer seasons. Roving Naturalists are seasonal interpreters whose primary responsibility is front-line interpretation of wildlife and nature on grounds at Brookfield Zoo. These interpretive experiences include Zoo Chats, animal encounters and conservation focused conversations. Due to cuts, the 2016 budget for seasonal staff was lost, putting these important guest engagement experiences in jeopardy. However, in 2016, we were able to increase guest experience in the park by refocusing the goals and objectives of the Roving Naturalist program. Appropriately using the Certified Guide course, we also increased our earned revenue projections by providing a capacity building program for students.

CIG Turning Loss Into Gain
Maintaining guest interpretive experiences after the complete loss program funding can be almost impossible for any organization to overcome. Interpretive Programs Staff at Brookfield Zoo faced this challenge for their Roving Naturalist program in 2016. The interpretive team reframed the goals program, with the help of the Certified Interpretive Guide program, and managed to increase guest experience and maintain the objectives and goals of the original Roving Naturalists program through strategic partnerships, internships, and our Continuing Educational Learning Opportunities (CELO) program.

The Roving Naturalist program changed, grew, and flourished with grant funded partnerships through the Chicago Zoological Society’s King Conservation Scholars Program, promoting teen engagement in conservation initiatives through interpretive training, interactive workshops, and college readiness programs, along with Benedictine University’s BEST (Benedictine Educating STEM Teachers) summer intern program focusing on the national need for increased numbers of highly qualified STEM teachers in grades 6 – 12. Focusing on meeting the goals of the grant funded programs while ensuring guest engagement satasification required providing program participants training, mentoring, and hands-on opportunities to learn and apply best practices for effective interpretive programming along with building skills that aid in college and real world market preperation, not limited to a zoo, wildlife park, or aquarium, and ensuring they effectively utilize interpretive principles and communication skills in future career choices.

Over the course of the now 12-week paid internship program, Roving Naturalists received their Certified Interpretive Guide certificate, animal handling training, and attended introductory workshops on Mission Based Dialogue and NatureStart (program development and implementation for children) training. In return, these interns, provided exceptional guest experiences at Brookfield Zoo while ensuring the department met the Chicago Zoological Socieity’s mission of inspiring conservation leadership by connecting people with wildlife and nature. The addition of an additional CIG course also allowed the society to earn extra revenue for the organization.

The Audience Research Department at Brookfield Zoo administered evaluation surveys to all of our participants to gauge program impact on the interns and zoo guests. During the 12-week period, our 10 Roving Naturalist interns engaged 40,336 guests, a 14359 increase over 2015 interactions. The surveys administered evaluation surveys to all of our participants. During the 12-week period, our 10 Roving Naturalist interns engaged 40,336 guests, a 14359 increase over 2015 interactions. The surveys...
understanding of interpretation, confidence in public speaking, and the ability to receive constructive feedback. On average, the team rated their understanding higher at the end of their internship compared to the beginning of their experience. The greatest increase in self-reported understanding was for duties, interpretive purpose, and the importance of interpretive themes. In addition to an increase in understanding, participants self-reported a growth in their own character, confidence, and behavior. All Roving Naturalists strongly agreed that their experience influenced future career and conservation choices while creating emotional conservation connections with zoo guests.

Conclusion
Through strategic partnerships, the Interpretive Programs Department at Brookfield Zoo was able to increase guest experience in the park by refocusing the goals and objectives of the Roving Naturalist program to fulfill the needs of our grant funded partners, interns, and organization. Additionally, through the appropriate use of the Certified Guide course, we also increased our earned revenue projections by providing a capacity building program for students.

References


Is Mission Based Dialogue For Me?

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Abstract
Mission Based Dialogue equips interpreters with the tools they need to engage in compassionate conversations around emotionally charged topics.

This emerging interpretive technique was originally developed to help interpreters in zoos and aquariums compassionately and respectfully talk with guests about issues such as animals living in captivity. However, we now feel the technique can be effectively used to help interpreters deal with emotionally charged topics in other venues. Interpreters working in cultural museums, war memorials and historical sites encounter people who have strong feelings about slavery, equal rights, religion and other sensitive subjects.

Introduction
Defined, Mission based dialogue is an interpretive technique in which participants gain mutual perception and understanding through active engagement in the communication process. —André Copeland, Jamie Zite-Stumbris Chicago Zoological Society

Based on the founding principles from Mette Lindgren Heldé’s, The Dialogue Handbook – the art of conducting a dialogue and facilitating dialogue workshops, Brian Forist and Doug Knapp’s Dialogic Interpretation, and Madeline Sigman-Grant’s Facilitated Dialogue Basics A Self-Study Guide for Nutrition Educators, we feel this methodology can be applied to organizations and situations beyond its original intent.

Body
Though Mission Based Dialogue was originally developed as a technique for zoo, wildlife park and aquaria interpreters, we began to question whether it would benefit interpreters in other organizations. After originally looking at peer reviewed research in which dialogue was used in national parks, we started looking at peer reviewed research in formal education and the medical industry.

Although often stated in different ways, four clear principles for engaging in dialogue emerge; trust, openness, honesty and equality. However in addition to focusing on these four principles, Mission Based Dialogue puts an emphasis on having a clear mission driven purpose. This concept is supported by work done at the University of Michigan’s Center for Research on Learning and Teaching where seven principles were proven effective. Of the seven, six are align with and support aspects of Mission Based Dialogue.

- Identify a clear purpose Starting a discussion with clearly articulated objectives can help shape the nature of the discussion and link it to other course goals.
- Establish ground rules or guidelines
- Provide a common basis for understanding
- Include everyone
- Be an active facilitator
- Summarize the discussion and gather feedback

Guidelines for Discussing Difficult or Controversial Topics; Center for Research on Learning and Teaching; University of Michigan

The principles above support the need for a mission directed purpose, the four principles of dialogue and Dialogic Interpretation’s elements such as but not limited to the connection assessment and final articulation of content.

According to BMC Medical Research Methodology’s study on Brokered dialogue: A new research method for controversial health and social issues, found “there are features of dialogue that make it unique as a generator of new knowledge and opportunities for social intervention.”

1) “Dialogue can isolate and help to clarify the nature and scope of disagreements and differences of perspective and values among interested parties involved in an issue.

2) Dialogue can reveal where positions/perspectives may be susceptible to change/revision/refinement. This is likely most important in cases where the assumptions underlying the various positions seem most polarized or entrenched (‘hardened”).

3) Dialogue can concretize and contextualize abstract concepts such as ‘fairness’ and ‘justice’ and make these ideas meaningful for stakeholders confronted with complex social challenges in their everyday experience [5].

4) Dialogue can illuminate opportunities for reconciling divergent perspectives.

5) Dialogue can illuminate pathways to potentially effective solutions or resolutions to issues for which there is entrenched disagreement among the interested parties.”

—BMC Medical Research Methodology’s study on Brokered dialogue
The findings in Brokered Dialogue support the theories behind Mission Based Dialogue in regards to the technique being used to provide clarification and leading to understanding different perspectives.

The understanding, awareness and appreciation for different viewpoints is a common thread among many of these techniques and is a main focus of Mission Based Dialogue. As stated in Controversy with Civility: Promoting Active Engagement in Civil Dialogue around Controversial Topics

“Promoting the active engagement in civil dialogue around controversial issues means the fostering of a sustained culture where different perspectives are respected and used to create opportunities for dialogue and understanding. This is done by bringing controversies into the open, giving space for dialogue around the issues, and having an appreciation for those who express differing perspectives. Engaging in controversy with civility also requires an awareness of one’s own worldview, an awareness of others, building trust, identifying the roots of controversy, and fostering dialogue (Alvarez, 2009).”

Conclusion
As society evolves and viewpoints change so must our methods of communication. The good work done before and leading to the development of Mission Based Dialogue also reveals the broad range of possible implementations. This is why we are confident this methodology can be used to have mission based conversations in a wide range of organizations.

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First Nations Community Engagement with Non-personal Interpretation: A Yukon Case Study

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Abstract
Working with First Nations communities to create non-personal interpretive products creates unique opportunities and challenges. Recent interpretive literature has focused on understanding and reaching target audiences. However, working with First Nations communities on crafting interpretive products underscores the importance of balancing audience expectations with community-based messages in a culturally sensitive manner. Through exploring practical examples of interpretive panel, publication and digital media development in Yukon, Canada, I will discuss how interpretation matters for promoting cross-cultural understanding and fostering reconciliation.

Introduction
Yukon government's Historic Sites interpretation program strives to interpret important messages about the cultures, history and geography within Yukon's major travel routes, rivers and trails. Through this program we develop interpretive panels at roadside pullouts and community historical walking tours and apps. We also operate a number of Historic Sites that are jointly owned and managed with First Nations. Working in a jurisdiction with 14 unique First Nations, 11 of whom are self-governing under Yukon Land Claims and Self-Government Agreements, we have both a legal obligation and ethical duty to include First Nations perspectives. When developing interpretive products, we are challenged to balance community and audience needs, highlight First Nations languages, and to appropriately communicating difficult history. This talk will further explore specific instances of how these challenges are addressed within interpretive product development.

Picturing People: Lessons from the Arctic Circle
One of the most photographed viewpoints along the Dempster Highway is the Arctic Circle interpretive kiosk, located at a latitude of 66° 33'N. When redeveloping the kiosk in 2015, we spoke with First Nations throughout the Dempster Highway corridor, both in Yukon and the Northwest Territories. Communities wished to express that they are strong in two worlds, continuing to actively practice their culture, while living in the Twenty-First Century.

In communicating cultural continuity, the selection of panel images was important. Rather than relying primarily on historical images, we sought out colourful, modern images. Perhaps the best example of this was a photograph that showed a youth on a boat along the Rampart River, photographing his caribou harvest with his iPad. First Nations input into the redevelopment of the Arctic Circle panels helped us to create a stronger, more vibrant overall product that reflects life in Arctic communities for visitors.

The Importance of Indigenous Place Names
Ten Indigenous languages from three language families are spoken in Yukon. As in many other jurisdictions struggling with the legacy of colonialism, Yukon's native languages are in danger of disappearing from everyday lexicon within a generation. Interpretation can help promote the visibility and usage of Yukon's Indigenous languages.

Yukon, like many settler districts, has adopted English place names for significant Indigenous sites. For example, Miles Canyon, upriver from Whitehorse was named after General Nelson Miles by an American geological surveyor in 1883. In the Southern Tutchone language of the Kwanlin Dun First Nation people, this place is Kwanlin, meaning “water running through a narrow place.” We are revising our publications and panels to highlight the name Kwanlin, stressing the importance of this special place for Yukon First Nation communities. This work is part of a larger project, led by the Kwanlin Dun First Nation, to document and interpret the community's history along the Whitehorse waterfront, much of which has been hidden by industry, development and forced evictions.

While not unsurmountable, there are challenges with using Indigenous place names and language terms within interpretive products. Firstly, words must be used in a way that a non-language speaker can understand the overall content. While there is a process in place to nominate place names through the Yukon Geographical Place Names Board, many local Indigenous place names are not officially recognized. As a government agency, we have to balance presenting official names with local ones, while keeping information clear and maps readable. Despite these challenges, the increasing use of First Nations place names highlights the Indigenous presence throughout Yukon. These names invariably link to important stories, oral traditions and landscape features, and it is important to keep them alive and express the Yukon's diverse Indigenous languages.

Sharing Difficult History
Due to the sudden and dramatic nature of the Euro settlement beginning in the late nineteenth century with the Klondike Gold Rush, Indigenous communities in Yukon have felt the impacts of colonialism acutely. Epidemics, land appropriations, forced evictions, bans on subsistence harvesting in some areas, and several generations of mandatory residential school attendance have contributed to social challenges and high levels of poverty in Indigenous communities. While interpretive products are often seen as a means to highlight the positive aspects of community culture and history for a broad audience, it is important to also address difficult aspects of local history.
A particularly sensitive topic in Yukon legacy of residential schools. Residential schools were government-sponsored religious schools established with the specific intention to assimilate Indigenous children into Euro-Canadian Culture. Many children suffered abuse, neglect and malnourishment at these schools. The impact on traditional cultures, languages and the intergenerational trauma of this period is significant, and Canada is just beginning to come to terms with this legacy. In Yukon, residential schools operated from the late-nineteenth century until 1968. When it comes to public interpretation, it is important for us to listen to our community partners and sensitively approach residential school history. We also need to provide enough historical context for an outsider to understand, which can be difficult with the limited word length of an interpretive panel. Once again, a picture can be worth 1000 words. In a visually poignant example, recent panel used a colourful painting of students departing for school in the back of a pick-up truck, showing the families left behind. Overall, it is important to situate these difficult periods of history within a story of cultural resilience and vibrancy. It is imperative to let Indigenous voices speak for themselves about the impacts of colonization.

Conclusion
Working with First Nations on crafting interpretive themes requires balancing audience needs with the messages communities wish to communicate. This balance reinforces Indigenous self-determination in choosing to how to communicate their culture and history to the public. As a government agency, working collaboratively with First Nation communities, takes a commitment of time and the willingness to listen and engage in open dialogue rather than come with a set agenda. The benefit is a stronger interpretive products that communities can take pride in and also create meaningful connections for visitors. Building relationships with First Nations communities through interpretive product development is a small but an important step towards fostering reconciliation.

References


Interpreting American Indian Connections to Public Lands

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Abstract
National Parks and other public lands are an important piece of our national heritage. Native people occupied these public lands for millennia prior to the arrival of Europeans, and many continue to maintain strong connections to them. This panel will present examples of interpretation of tribal connections to important sites and offer opportunities to discuss the sometimes controversial issues involved.

Interpreting American Indian Connections to Public Lands
Yellowstone National Park, Glacier, Yosemite, Denali, and many more, all conjure mental images of swaths of uninhabited, awe-inspiring wilderness—home to rich forests, clear flowing streams, and iconic wildlife. But not that long ago, these landscapes were inhabited by diverse tribes of indigenous people, who moved through these lands in seasonal rounds, to hunt and fish for meat, to gather berries, herbs, and other plants for sustenance, medicine, and ceremony. With their deep understanding of the natural world, passed from generation to generation, our continent's first peoples sustained themselves and created rich and meaningful cultures that endure today.

The story of how our public lands were preserved and protected—enshrined for enjoyment by all—almost always has a troubled and painful history behind it; of the decimation of tribal populations, of their subjugation onto reservations, of their struggles to maintain their communities and cultures through harshly difficult times.

As interpreters and caretakers, how do we balance celebration and understanding of our vital and beautiful public lands with the legacy of the tribal peoples who once called these places home? How do we assure that the story we tell is authentic, meaningful, and accurately represents the perspective of tribal people with long connections to the site? What do we do when traditional tribal-based wisdom, knowledge, and beliefs contradict that of Western-based scientific findings? How can resource management and interpretation help support traditional cultures and build greater understanding, respect, and dialogue?

These are challenging questions. The National Park Service in recent years, as caretaker to many of these special places, has placed a priority on interpreting tribal connections, past and present, to their sites, oftentimes seeking to correct inaccurate and ethnocentric interpretation of the past.

This panel presentation takes a case study approach. The panel represents three different roles and perspectives on the exhibit design process: NPS client, tribal representative, and exhibit developer/designer who will present and discuss their experience with multiple NPS interpretive exhibit projects, the lessons they have learned, and the challenges that lie ahead.

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Connecting Diverse Communities with Interpretation and Park Careers through Paid Internships

A case study in creating a program in partnership with local agencies that recruit, pay, and support interns from select backgrounds

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Abstract
Paid internships are a proven method for recruiting youth from diverse backgrounds into careers in parks and interpretation. However, many interpretive organizations are unable to directly compensate interns or cover the cost of wages - and many foundations do not fund stipends or wages. The Black Diamond Interpretive Internship draws on the capacities of three agencies, along with a focus on positive youth development, to offer high quality paid job training, exposure to careers in parks and interpretation, and an experience that supports personal and professional development, to local high school juniors and seniors who face multiple barriers to employment.

Introduction
This internship builds on the strengths of all participants, with support from a regional park district, a county office of education, and a county workforce development board. First piloted in 2016, after more than a year of planning, the program is rooted in a commitment to removing barriers to park and interpretation careers and a focus on programmatic sustainability. It is led with a steady focus on positive youth development. This intensive internship provides 160 hours of work and job training experience for a group of four for six students, with an emphasis on communication skills and other foundational skills that are transferable to any career. All of the interns who participated in the first-year pilot-program completed the program and 50% of them have since been hired into entry-level interpretive positions within the Park District. The second pilot-year internship program will wrap-up in early November, 2017.

Foundations for Partnership
The three organizations that are partnering to provide this program have many shared interests. East Bay Regional Park District aspires to build and sustain deep connections with all of the communities it serves and to employ a workforce that reflects the diversity of these communities. It has an established commitment to youth employment.

Contra Costa County Office of Education Youth Development Services helps young people enter the workforce and post-secondary education with the knowledge, skills, and abilities to be successful - through work experience, mentoring, academic support and career development assistance. It employs case managers who support enrolled students and connects these students with professional development opportunities.

Contra Costa County Workforce Development Board is committed to providing opportunities that connect teens and adults with careers that provide a sustainable wage. It distributes federal funds, made available through the Workforce Innovation and Opportunity Act (WIOA), along with funds from other sources, to pay for case management costs and wages for programs like this internship – one of many WIOA-funded work-based learning opportunities.

Partnering with a local Workforce Development Board (sometimes known as a Workforce Investment Board) and one or more of their providers – third-party organizations that support such programs and serve as the Employer of Record for paid work experiences - is a powerful model that can be replicated elsewhere.

This partnership model makes it possible for interns to be recruited and selected with an eye toward equity, to be mentored by an expert interpreter, to have a federally funded paid internship, and to do so with a safety net; Each intern works with a case manager from the Youth Development Services office who can provide additional support as needed.

The community partner – either a governmental or a non-profit organization, in this case the Youth Development Services - plays an essential role in connecting youth with these opportunities. Successful recruitment of participants who are not yet connected with the organization that hosts the internship requires a dedicated and trusted community partner that can assure youth and families that the internship opportunity is safe and worthwhile. The community partner also supports the program in progress, by checking in regularly with participants and upholding high expectations for participation and accountability.

Positive Youth Development
Positive Youth Development (PYD) is a model that has been adopted by organizations around the world to build up youth
in ways that contribute to them becoming engaged in their community, and feeling supported and successful. The mantra of Positive Youth Development is straightforward and can applied in any moment: Positive Experiences + Positive Relationships + Positive Environment = Positive Youth Development.

PYD diverges from other approaches in that it recognizes and aims to develop the strengths that are emerging in any individual at any time in their life, rather than striving to prevent or treat problems that may be stereotypically associated with certain stages of life or developmental hazards. This positive framework suggests that “if young people have mutually beneficial relations with the people and institutions of their social world, they will be on the way to a hopeful future marked by positive contributions to self, family, community, and civil society.”

Providing opportunities for youth to be productive in a way that gives them the satisfaction of contributing to their community – while simultaneously building their capacity to contribute to community – is a powerful way to build connections between teenagers and the world that they will soon navigate as adults.

The Black Diamond Interpretive Internship is (at least) a second-generation Positive Youth Development program, as the professional interpreter who leads this program was inspired to pursue a career in this field as a direct result of her participation in a program with similar goals - Teen Environmental Education Mentorship - which was and continues to be offered to high school students by Nature Bridge at Marin Headlands.

The internship at Black Diamond aims to continue this cascade and, in doing so, to contribute to the broader effort to connect diverse communities with careers in parks and interpretation. As part of this commitment, in the second pilot-year of the program, a graduate from the first year’s program is employed as support staff for the program. The lead interpreter has seen how quickly and deeply the young interns relate to this assistant, and how valuable these connections are to the lead interpreter, the assistant, and the interns. The program hopes to continue to employ an assistant, from among recent intern groups, whenever possible.

**Conclusion**

Non-profits or other organizations that do not have the funds or capacity to employ and/or pay interns can work with established partners, who have existing funding sources, to make paid internships with selective and successful recruitment possible. The cost of labor for the staff that lead the internship will likely be the primary cost of hosting a program using this model. Interpreters who seek to build or sustain a paid interpretive internship will find many resources available to guide the process. Much has been written about Positive Youth Development and people who have successfully (or unsuccessfully) implemented and led similar programs are a valuable resource as well.

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Imagine a Country: A National Project of Parks Canada for 2017

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Abstract
Imagine a Country is a participatory project from Parks Canada launched for Canada 150, comprised of a new national exhibition project at 5 historic sites and multiple outreach installations, which required managing national objectives and local perspective. Our presentation will share details about the different ways that participating sites chose to adapt the national program elements, as well as outline the key factors that supported the overall success of Imagine a Country. Plus, you’ll get a chance to Imagine a Country with us!

Keywords
Participatory history, interpretation, best practices, outreach,

Introduction
In 2017, a landmark celebration year for Canada marking its 150th birthday together with the 100th anniversary of national historic sites, Parks Canada launched Imagine a Country, a new national exhibition project at 5 historic sites and multiple outreach installations.

How participatory history spread its wings across Parks Canada Imagine a Country is a participatory project originally conceived at Sir-George-Etienne Cartier National Historic Site in Montreal. Visitors are invited to share their vision for their ideal country, inspired by questions and sentence lead-ins to prompt personal reflection. They take a photo of themselves with their idea, and add it to an ever-changing and ever-growing photo gallery documenting their collective visions. This experience puts visitors in the centre of the story, linking the history of Canadian Confederation efforts to their own lived experience, and see themselves as contributors to the ongoing story of Canada.

Conclusion
Our presentation will share details about the different ways that participating sites chose to adapt the national program elements, as well as outline the key factors that supported the overall success of Imagine a Country. Plus, you’ll get a chance to Imagine a Country with us!

References

Parks Canada effectively expanded this local idea to develop a national product package that could be adapted to multiple historic site realities, and tie to multiple historic themes. Each site was able to define how to apply the suite of core elements that were consistent across the program, with lots of room for local customization. The project has been very well received by participating sites, and is an example of how national projects can be managed to ensure successful implementation across multiple sites.
Genius Loci: Eco-criticism and Interpreting Place

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Abstract
The idea that places have meaning is inherent to interpretation. However, the roots of this idea date back to philosophers and thinkers in a wide variety of fields. Place studies is a branch of philosophy, sociology, and literary criticism, which looks at what a place is. Combined, these theories form eco-criticism, and interdisciplinary practice which looks at how humans relate to and express the place around us. By understanding eco-criticism, an interpreter can more fully understand how places do have meaning, and what that exactly means.

Introduction
What does it say of a society that refers to forest as "home"? What does the color green in “green studies” mean to a culture? What does the independence of the wilderness in adventure stories mean when compared to the dark woods of fairytales or the cabin in the woods of horror stories? Furthermore, why do people talk about their environment in the way that we do, and how does that affect our relationship to place? Many principles, from literary theory to social geogrpahy, go into understanding place studies and eco-criticism.

Genius Loci
1. What is eco-criticism? Defining the interdisciplinary.
2. How does eco-criticism work and what is it looking at?
3. How can an interpreter benefit from eco-critical theory?
4. How can an interpreter use eco-critism?

Conclusion
Humanities and sciences are not as disparate as people believe. The theories within philosophy and literature not only affect our culture and sociology, but also how we relate to and communicate science. Science is not in a vacuum. The culture absolutely affects our relationship with place and nature. By understanding what meanings we hold in places, and why, we can more understand nature and place itself, and interpretation as a whole.

References
Abstract
The outdoor industry relies on the belief that wilderness areas are truly “our lands”. However, it is important to make sure that these lands are accessible to everyone. By working to be more inclusive interpreters can help ensure that people of all backgrounds, especially those from marginalized communities, are provided with inclusive, understanding interpretation that does not ignore historically marginalized people. It is important to recognize that the image of the outdoor enthusiast need not be white, able bodied, wealthy, neuro-typical, or straight. Outdoor recreation should be inclusive to everyone.

Introduction
In my former classroom, my students asked me for suggestions for summer work. I mentioned working a seasonal job at a national park or other wilderness area. One student looked at me in concern. “I don’t know,” she said. “Do black people work there?”

At another seasonal job in the Caribbean, I spoke with a co-worker who was considering a position in Alaska. She loved the idea of wilderness, glaciers, and bears. But, she had one concern, “Will I be accepted there as a woman of color?” she asked. In my own experience, if you walk into most sporting stores, there are images of powerful men doing athletic feats, and of sexy women in crop tops. The figures are almost always white. None were in wheelchairs. Surrounding these displays were high-priced clothing and shoes, labeled as the essentials for a hike. I remember joining a group of brand-wearing hikers who were aghast at my jeans and tennis shoes. In reality, I couldn’t afford the gear.

While public lands are our lands, too often we find that the image of who is an outdoors-person is too restrictive, and can feel like an exclusive club.

Trying to Get Woke Outdoors
1. Problems with how we picture an outdoor enthusiast.
2. How can we work to help fix these problems?
3. What does it mean to be inclusive?
4. Why does it matter to be inclusive?

Conclusion
If we want to protect our lands, it is important to remember that our means everyone. We need to engage all people. If we believe that being outdoors is inherently good, then we need to make sure people of all backgrounds have the chance to experience it. This is something we need to do every day, as a way of reaffirming that this land really and truly belongs to you and me.
Promoting Access to Visitors with Disabilities on Public Lands

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Abstract
Come learn how you can get people with mobility impairments out onto their public lands. Through a slide show presentation, Topher Downham will show ways of providing information through different media sources including guidebooks, videos, and web pages. Topher will address some of the common problems with accessibility on trails and at facilities. He will also introduce appropriate and inspiring ways of providing interpretive programming for visitors with disabilities. Wheelchairs will be provided for a hands-on experience of mobility impairments.

Introduction
In 1995, Topher Downham had an accident in a swimming pool that left him a c6-7 quadriplegic. As a resident of Boulder, Colorado he was surrounded by nature and had always spent a lot of time in the outdoors hiking, skating, and biking. He thought he may now be confined more to the indoors. While grieving his tremendous physical loss, he started exploring the trails around Boulder in his wheelchair, looking for trails that were accessible. In the process he found solace in nature. He found it helped with his anger and frustration. He realized that he had not lost everything as he once thought and he wanted to share this with others in his situation.

Since 1995, Topher has been looking at ways to get people with disabilities and elderly people outside. By 1998, Topher was volunteering alongside City of Boulder Open Space, Mountain Parks, Parks and Recreation, Boulder County Parks and Open Space, and Eldorado Canyon State Park to measure trails, categorize accessible ones, and create a guidebook for local accessible trails. He then disseminated the guide to anyone that needed it.

Promoting Access to Visitors with Disabilities on Public Lands
Connecting with nature is helpful, therapeutic, and necessary for everyone: hikers, bikers, equestrians, pedestrians, fishermen, birders, and people of all nationalities and all abilities. Sometimes certain groups get lost in the shuffle. When Topher started working for City of Boulder in 2001 as an Outreach Specialist, his main job was to connect users to OSMP lands in a positive and safe manner, at the same time creating stewardship and appreciation. He was able to focus on nature for people with disabilities by leading nature hikes for the disabled community.

There are many ways to reach people with disabilities and the elderly. Social media can help, but it is not very effective on its own. Providing information by integrating various forms of media such as newsletters, emails, flyers, advertisements, guidebooks, videos, the internet in general, and face to face contacts works well.

Covering logistics specific to elderly and disabled populations is also necessary for growing participation of this user group. Bathroom location, time of hike, transportation, parking availability, trail conditions, and resting locations along the way are all very important concerns. Providing programming and equipment appropriate to the area is also important. Choosing topics that are interesting also generates interest. Collaborating with other groups such as retirement communities and the Audubon society will help reach a larger quantity of people.

Experiential wheelchair hikes can assist in getting able-bodied employees from your organization on board. One of the biggest problems is that many people don't know the challenges that disabled users face. They don't know how difficult a slight change in grade or cross lope can actually be. When able-bodied people roll out on the trails in wheelchairs, they develop a newfound understanding. With this empathy, they can become allies of the elderly and disabled populations.

Conclusion
There are many ways to assist people with disabilities and elderly people in connecting with nature and the outdoors. Choosing only one way will not be effective. To be committed to connecting these populations with the outdoors, an organization needs to combine all available resources (outreach, education, public information, mapmaking, organization collaboration). This includes trail builder's buy-in. Without accessible trails there cannot be accessible hiking. Without information, people with disabilities won't know the availability of these trails are. All people deserve a connection to nature.
The App Doesn’t Fall Far From the Tree: Embracing Mobile Technologies for Visitor Engagement

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Abstract
A smartphone is the most indispensable tool for people as they navigate their world. It is vital that interpreters seize that opportunity to meet visitors in “their” world and give them access to information through their personal devices. By leveraging easy to use tools and existing resources, mobile apps are within reach for organizations of all sizes and can be an extension of current visitor engagement strategies. Mobile apps should be leveraged as a multi-tool to help your organization cater to different demographics, communicate with visitors, provide offline access to information, and, of course, meet educational goals and share your stories!

Introduction
Interpreters and their organizations should adapt to changing technologies and learn how to leverage mobile technology to reach a broad audience, meet the needs of different demographics, and tell their stories in new and exciting ways.

The App Doesn’t Fall Far From the Tree
Mobile apps can be an effective tool to help with many challenges experienced across natural, historical, and cultural sites.

Apps can help educate visitors 24/7 by providing a variety of interpretive content such as images, videos, or audio tours, regardless of staffing issues. Educational content can reach a broad audience by providing accessible content, multiple languages, and content developed to engage children, including games. Apps also provide a method to deliver consistent interpretive messages.

Mobile apps can help share the unique story of each visitor destination, providing a way to engage with the public, share history, and educate visitors on how to be a good steward—all essential to fostering a deeper appreciation of our nation’s natural and heritage sites and the need to preserve them for future use.

Many organizations based in nature are still “offline” once visitors leave hub areas such as visitor centers and many indoor destinations face connectivity issues once visitors move past main entrances. Connecting with visitors after they are fully immersed in your destination can be difficult. Having content downloaded onto a visitor’s device allows them to access essential info such as educational tours, FAQs, safety info, trail maps, and recreational opportunities while offline.

Locations with connectivity can offer visitors additional functionality by providing hands-free touring, in which GPS coordinates trigger educational content while walking or driving. Bluetooth beacon integration can also trigger content when connectivity is not available. Both methods allow visitors to self-tour and spontaneously discover points of interest they many not otherwise know about.

Push notifications can be used to communicate with visitors and locals alike. Alerts can be sent to inform app users of upcoming events or time sensitive alerts such as closures or hazards to avoid.

Friends groups can leverage mobile apps to fundraise and drive memberships.

Though technology may seem out of place at your destination or out of reach due to organizational limitations, it is an attainable and valuable way to meet both organizational and educational goals.

Technological advances have made it easy for organizations to build and manage their own apps. With existing resources (such as brochures, recreation guides, voices of interpreters) and easy to use tools (such as audio recording, smartphone cameras, and DIY platforms), organizations can quickly create content for apps. Partnerships, such as Friends groups, can also help provide extra help to build and maintain the app when your organization is short on staff. Sponsorships with local partners can also help organizations fund the creation of mobile experiences.

The U.S. Forest Service has seen the necessity to meet the changing needs of visitors and has entered into a partnership with OnCell to develop a National Forest System-wide app with corresponding tours and visitor information for each National Forest, Grassland, and Prairie. The aim is to launch an app for every forest destination to enhance the visitor experience, educate visitors, provide essential information offline, and enhance communication.

Apps built as part of the new USFS mobile program will be used to deliver interpretive content to engage visitors and a wide variety of audiences, including individuals, children, or those with disabilities by using accessibility features. Apps can provide offline access to trail maps, location of visitor centers, and recreational opportunities and can be leveraged as a 2-way
communication tool—using push notifications for emergency alerts and surveys to collect visitor feedback. Forests will manage their own apps, add content over time, and send real time notifications to users.

Mobile apps have become an essential part of a visitor's toolkit and visitor destinations of all sizes need to have a mobile strategy in place.

Conclusion
When developing visitor engagement strategies, interpreters should:

• Understand the need to adapt to changing technologies.
• Understand the need to cater to different demographics and broad audience when developing a mobile strategy.
• Develop a mobile strategy that is effective, engaging, and can benefit your entire organization - think multi-purpose!
• Understand that small organizations can accomplish big ideas too.
• Understand how to leverage resources and make the most of what you have.
Take Me to the River: Interpretation on the Water

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Keywords
Water, kayaking, canoeing, interpretation, paddling, safety

Abstract
Providing public and group programs on the water using canoes and kayaks presents opportunities and challenges. Offering paddling trips with trained guides that use effective interpretive techniques and materials can help you connect your audience to your site's aquatic resources in a fun, safe manner. All it takes to setup your own effective program is planning, training, the proper equipment and a body of water.

Introduction
For your site or organization, offering interpretive paddling trips provides your visitors a unique way to learn about your sites natural and cultural history while reconnecting with nature. Paddling a boat allows the participants to "experiential learn", that is learn through interaction and observation. It allows them to see the resources of your site, the animals, plants, historical structures, etc. from a different perspective, on the water, versus from land. The participants also learn paddling skills as the guide (interpreter) on the trip uses interpretive materials and techniques to peak their curiosity and make connections to the resources around them.

Benefits of Paddling
You might have noticed that when you are around a pond, lake, river or the ocean that you feel calmer and happier. Marine biologist Wallace J. Nichols wrote a book on the remarkable effects of water on our health and well-being called Blue Mind: The Surprising Science That Shows How Being Near, In, On, or Under Water Can Make You Happier, Healthier, More Connected, and Better at What You Do. Nichols studied the neurological, psychological and emotional changes our brains experience when we are close to water. Understanding how humans connect with water will allow you to better develop opportunities for your participants during your paddling trips.

Being in a boat that you propel with your arms allows you to be close to the water at the speed and direction you want to go. Canoeing and kayaking are great activities that are low impact and provide many benefits such as fresh air, vitamin D from the sun, reduced stress, an upper body workout, aerobic conditioning, quality time with family and friends, and a sense of accomplishment. People are often more open to learning about what is around them while paddling.

Interpreting on the Water
The Interpretive Equation described by Becky Lacome states that developing an effective, interpretive program requires knowledge of your resource plus knowledge of your audience, then using the appropriate techniques to create an interpretive opportunity – (KR + KA) x AT = IO. The same applies to interpretive paddling trips. However, the interpretation you provide might not be in a structured, linear fashion like you often see on land. An interpreter on the water must be flexible with their program since what you see and witness can change from trip to trip. What works well is having a general topic or theme with components you can add or take away depending on your audience, water conditions, and what you see. The topic or theme could be historical/cultural (The Explorations of the French Voyageurs) or natural (the Geology of the Potomac River Gorge), and include universal concepts such as beauty, change and love.

Your paddling trip begins before your group is even on the water, in a circle with introductions, a review of the trip, and a safety message. This helps the group to bond and provides you important information about your participants such as ability, experience, and interests. Then you give the body of your presentation once everyone is on the water and is comfortable paddling in their boat. During the paddling trip, the interpreter should have several activities and demonstrations for the participants to try such as: having the group be silent to listen for sounds of nature, pushing on peat underwater to release methane gas, or feeling seaweed and examining its structure. Having activities using binoculars, nets, water buckets, chemical tests and other hands-on gear will capture the curiosity of your participants. Occasional stops along the shore to explore what can be found at the waters edge can also be very compelling. A good source for activities you can modify for the water is Joseph Cornell's book Sharing Nature – Nature Awareness Activities for All Ages. Try to involve all five senses if you can for a more interactive experience. However, make sure to not overplan a paddle trip with activities but leave time for some quiet contemplation and FUN! Once your participants are back on dry land, your paddling trip should conclude with a sharing circle where everyone has a chance to share what they learned and most enjoyed.

Paddling Program Options
Offering paddling trips at your site may require you to purchase equipment, train your staff, and come up with a safety plan, or hire a guide service, depending on what will work best for your site.

Operate Your Own Trips
Pros- easy to ensure program quality, all fees go back to your site. Cons- large outlay of funds for equipment and training, liability concerns, larger staffing requirements than other options.
Provide Staff Members on Contractor-operated Trips
Pros - no equipment to purchase, easy to ensure quality of interpretation, limited liability. Cons - less fees go back to your site, greater limitation on availability of trips.

Permit Private Companies to Operate Independent Trips
Pros - no equipment to purchase, almost no liability. Cons - more difficult to ensure quality, even less fees go back to your site.

Safety
Injuries and liability are often a concern when deciding to create a paddling program at a site. If staff are trained properly, equipment is properly used, and a safety plan is followed, the risks to your participants will be very small. The American Canoe Association (ACA) has a website with resources and instructors to train staff members in paddling skills, trip planning, and rescue skills to minimize the risk of injury. Your visitors come in all sizes and abilities so make sure that your trips can be provided to everyone who would like to participate. The ACA offers Adaptive Paddling Workshops that teach the skills and knowledge needed to outfit equipment and modify teaching styles so people of all abilities can participate in paddling trips safely and comfortably.

Launching Your Paddling Program
Just remember, your paddling program must have SMILES.

Safety – First aid and rescue training, rescue gear and safety plans
Meaningful, obtainable destinations – Appropriate trip distance and length of time
Interpretive opportunities – Using the appropriate materials and techniques
Leaders – Trained guides in leading public paddling trips
Equipment – Boats, pfds, paddles, transportation, and safety gear
Smiles – Positive, fun attitudes

When you start your interpretive paddling program at your site, offer just a few trips at first to ensure you have addressed all equipment, training and safety needs. Guided trips tend to be very popular so you will need very little publicity to fill your boats.

Conclusion
Offering interpretive paddling trips can help you connect visitors to your site’s resources in a compelling, fun, safe manner. With the proper planning, training, equipment and a body of water, your site can provide your visitors with unique, transformative experiences that they will remember for a long time and that will meet your sites interpretive goals.

References
The River Mile Network

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Abstract
The River Mile is a network of educators, students, resource managers, scientists and informal educators sharing what they know and learn about the Columbia River Watershed including best practices, lessons learned, examples of participation, links to resources and real world scientific data.

Body
The River Mile Network (TRM) is a participant driven approach to investigation and understanding of the Columbia River Watershed to explore the essential question: How do relationships among components of an ecosystem affect watershed health? The program is managed and presented by Lake Roosevelt National Recreation Area, a unit of the National Park Service, along with partners who represent natural and cultural resource professions and the education community.

Pacific Education Institute (PEI) and The River Mile (TRM) provide STEM teacher training that brings environment, agriculture and natural resources into science education. PEI's FieldSTEM™ technique integrates the new Washington State Learning Standards combining Next Generation Science Standards with Common Core English Language Arts and Math, using a local area of each school as the focus for learning.

Come chat and learn about The River Mile Network and how we integrate participation in Field investigations, and data collection and sharing, into classroom curriculum.

www.therivermile.org
Building Relationships Using Artifacts

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Abstract
In a time when people are becoming increasingly disconnected from nature, many species and environments need our support to survive. Artifacts provide us with a unique opportunity to build these essential relationships. The Toledo Zoo developed an interpretive training specifically targeting these opportunities for our volunteers. Through exploration and application of Freeman Tilden's "Principles of Interpretation", relate, art, whole and appropriate, interpretaer can design more effective visitor interactions.

Introduction
We utilize artifacts to tell stories. In Freeman Tilden's book, "Interpreting Our Heritage", he outlines 6 principles of interpretation that when properly applied, make powerful and lasting connections. At the Toledo Zoo, we created an introduction class for incoming interpretive volunteers that walks them through some of these principles and how they can apply them to the artifacts they use with our visitors.

Training
The goal of each training is to give our volunteers techniques to help our visitors better understand, appreciate, empathize, and hopefully support, nature. Artifacts allow us to create relationships by taking the unknown, scary or disconnected, into a safe and engaging space. These techniques can be applied to natural, historical and cultural artifacts. As Emily Jacobs said in my CIT training, "Anyone can give facts. Interpreters make it interesting."

Students learn these techniques by participating in group discussions that take them through Tilden’s Principles of Interpretation. Specifically, we focus on relate, art, whole and appropriate. (Tilden, 1957) As an introduction, we have a short discussion on Tilden’s 3rd principle of art. The main focus is to highlight the importance of the audience’s interests. We facilitate a short sharing session of programs or experiences that left a lasting impression. In other words, what did you do, or experience as an audience member, that captured and encouraged interest.

Each table then receives an artifact that they’ll use throughout the training to build an interpretively engaging story or interaction. We will discuss Tilden’s 1st principle on relating to our audience. We will borrow from the CIG curriculum and complete the “Tangible/Intangible” activity. In groups, they will list words to describe their artifact, then list words that show what the artifact means, and then selecting universals from those lists. This section is especially important to building relationships between our visitors and our resource. If they can see how an animal or concept relates to them, they are more likely to understand and empathize with it. We will come back together as a full session to share some of the words they brainstormed from each list.

We then move into Tilden’s 6th principle on age appropriate. Using the same artifact from the 1st principle, groups will brainstorm questions, facts and concepts for various age groups, all while integrating the universals they identified. They will be provided with information on age appropriate techniques to help guide their discussions.

Finally, we highlight Tilden’s 5th principle about the whole of a person. They choose an age and fact/concept from the 6th principle to develop into an experience that engages multiple learning styles and senses. Afterwards, each group will present their final visitor experience to the full session.

Conclusion
This training has proved itself effective with our volunteers. They have moved from basic facts like the location, diet, size and name of an animal to conversations about the abilities and “wow” information that help visitors connect with our animals. In staff observations, visitors previously declined to ask questions of our volunteers but after utilizing these techniques we are finding our volunteers with crowds gathered around them as they tell the story of an animal. By taking Tilden’s principles and looking at how each one applies to artifacts we can create meaningful connections between fact and emotion. Participants in this workshop will hopefully reexamine the facts and explanations they use with artifacts.

References
A Study of Marine World Natural Heritage in China

Thinking Globally about Marine Heritage Resources, Thinking Globally about Sustaining Marine Ecosystems

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Abstract
This session will explore Marine World Natural Heritage in China and worldwide, summarizing how marine heritage sites are designated, the contributions they make to global ecosystem health, and how China, the U.S., and other countries can collaborate in the future to protect marine heritage and marine ecosystems worldwide.

Introduction
In recent years, negotiating marine rights among countries has become more complicated. Coastal countries establish and implement marine protected area policies to maintain control over marine resources, establish zones of influence, and maintain quality marine ecosystems. The 18th National Congress of the Communist Party of China has demonstrated that China will strongly safeguard her marine rights and interests, strengthening their marine power. If marine environments are to receive adequate protection, we must define the value of marine heritage resources, outline the actions required to sustain marine ecosystems, and consider strategies for global cooperation.

A Study of Marine World Natural Heritage in China

The definition of Marine World Heritage: In conclusion, there was no clear and unified definition of marine World Natural Heritage, researchers define marine heritage differently. So there is a big difference among the marine World Natural Heritage list they provide. In this situation, the analysis of the current situation of marine World Natural Heritage nationally and globally is very necessary, and in order to explicitly state the outstanding and unique features of marine heritage, the expansion and extension of evaluation criteria on Outstanding Universal Value (OUV) is also in need.

Heritage Value: The study of the heritage value of the World Heritage sites generally applies case study on a particular heritage site. Scholars from all over the world are often based on the evaluation criteria on the value of World Heritage. These studies focus on the aesthetic value, scientific value, geo-value and other aspects. There are scholars that have studied environmental values, tourism value. It can be said that although the research perspective is different, they mainly attach much importance on the uniqueness and Outstanding Universal Value of a particular heritage site and highlight the universal value, so as to find its irreplaceable heritage value.

Heritage conservation and management: the method of case study and comparison study have been applied in the study on heritage conservation and management. From the standpoint of management system and management reform, the issue of management system reform and innovation, the issue of sustainable development have been discussed. Researchers use case study to explore the status of resources of the World Heritage, the existing problems, and put forward the improvement measures to better protect the heritage sites. From a comparative perspective, researchers have explored management systems and mechanism in the world, and the results could be applied in the planning, designing, development and protection of local World Heritage site.

With the popularity of the World Heritage designation, scholars have begun to pay attention to the relevant issues of World Heritage declaration, and it has become a new and popular focus.

The body of the presentation will also focus on the research on community, especially on community perception, community attachment and community involvement. Based on the theory of land-people relationship, the research on sense of place will be introduced too.

Conclusion
Basically, a model of making community participate in the marine heritage management process and conservation system will be emphasized to achieve the goal of Thinking Globally about Marine Heritage Resources, Thinking Globally about Sustaining Marine Ecosystems.
References


Cultural Heritage Interpretation from Mexico: Celebrating Our Diversity and Common Humanity

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Abstract
Interpretation of cultural heritage in general, and of archaeological sites in particular, poses important challenges. These are even greater in a country like Mexico, where archaeological remains are everpresent and destruction and looting are constantly threatening their preservation. To respond to these challenges, a “Mexican Style” variant of Sam Ham’s thematic interpretation is being developed. Its theoretical foundations in anthropology, history and the social sciences will be explored in this presentation, with examples of its methodological application in a current project in an archaeological site.

Keywords
Cultural heritage, thematic interpretation of archaeology, INAH, Mexican archaeological sites, cultural diversity

Introduction
Heritage interpretation has a common foundation that is applicable to both natural and cultural heritage. While this is true, it is also true that there are important differences between these domains. They have to do both with their specificities as well as the way science is conceived and practiced. Interpreting archaeological sites is a good case in point. Current debates in archaeology question the existence of theories with generalities that explain particular cases—generalities resulting from the application of the scientific method, which is normally taken for granted in the natural domain. Environmental interpretation (and interpretation at science and children’s museums) rely heavily on bodies of theories and data that normally have high degrees of consensus; and use interpretation techniques that allow many times for the physical handling and direct manipulation of heritage itself, a condition that is only partially satisfied at archaeological sites.

In Mexico, with a huge and rich archaeological heritage, this had led to a tradition of interpretive labels at archaeological sites that were actually not interpretive but descriptive. Academics fear to go “beyond the available evidence” or to enter into theoretical debates, and description is their way out of that conundrum. The federal office in charge of this task recognized this situation some time ago, and started migrating its communication strategy towards thematic interpretation, following Sam Ham’s ideas. Its application required some adjustments and additions, which have led to a “thematic interpretation, mexican style” that builds on the original ideas and supplements them with contributions from anthropology, history and the social sciences—and from other fields, like dramatic theory, in order to fulfill the mission of allowing for a rich, personal connection of visitors with our heritage and the adoption of a sense of co-responsibility in its conservation.

We have called our version of archaeological interpretation “Divulgación significativa del patrimonio arqueológico” (there is no exact translation for this term, but the closest would be “meaningful dissemination of archaeological knowledge”). It is based on Ham’s TORE model—and on a variant of the elaboration likelihood model. But it adds new principles in order to be applied to archaeological sites. These come from anthropology, specially from the idea that cultural diversity is to be celebrated, and local, regional and national identity promoted and appreciated; but, at the same time, a recognition of our common humanity is crucial, since it is the connection with widely shared meanings and values what makes heritage not only comprehensible but enjoyable. This idea resonates with Larsen’s idea of “universal meanings” (Larsen, ed. 2013) and tries to accomplish the same goal: to generate the necessary empathy for heritage that will translate on its appreciation and conservation. In this process, heritage serves two important goals: first, it allows us to “de-naturalize” cultural practices, by showing them to be socially derived and not “genetic”, “natural” or somehow “the correct ones”—cultural diversity shows precisely that: there is no practice that can claim the only way to solve human common problems and needs; and second, to “historicize” them, that is, to show that all cultural practices are dynamic: they are not “eternal”, “everpresent” or “essential” in some way, but they had all origins, have transformed across time, and may be transformed again. This last idea is crucial, since it implies a “principle of hope” (Gándara 2016) that allows to interpret even the worst human mistakes on an optimistic light: we have had both successes and failures, but we are capable of colectively working towards a more equitable and sustainable world, since all cultural practices can be transformed.

This ideas have been applied in a current project for the site of Xochicalco, south of Mexico City. The site’s main heritage values are concentrated in a pyramid with images of people from several areas of Mexico which at the time were in conflict with each other, but that here they appear together peacefully; and the same pyramid shows the representation of a calendric correction, in which presumably these specialist participated. The site has an impressive astronomical observatory that was built to observe an eclipse that probably was a key event in the calendrical correction. The thesis (theme) would be something like “Xochicalco shows how people can be capable of putting aside their differences and work together to achive a common good”. In prehispanic times the calendar coordinated not only a persons fate, but the
agricultural, ritual and even war cycles; so it was a common concern to all cultures.

This is not the only way Xochicalco has been understood by the profession. The main alternate viewpoints will also be briefly discussed in the labels. But this fact itself shows that interpretation can not be theoretically-free, and that archaeologist can not claim to be “neutral” when interpreting sites.

Conclusion
The shared meanings of solidarity, cooperation, sharing, and at least temporarily putting the common good before the individual interests of groups are the means of generating a personal connection, empathy and relevance, and the material for the visitors to reflect upon during and after their visit to the site. All appeal to values based in our common Humanity, while showing the various ways these values can be expressed at different times and cultures. They are also meant to provoke curiosity at to what led to the site’s decline –it was long abandoned by the time of the Spanish invasion.

Our thesis, interpreted as one of the possible explanations for the site, can be an opportunity to show that archaeology, like any science, is a field in construction, where debate leads to new research and to better approximations to what happened in the past –debates that can only be settled if our archaeological heritage is preserved.

Our project includes an evaluation phase for the new labels once they are in place, which will tell us if our approach is at least moderately successful. And, while still under development, we think that our “thematic interpretation, Mexican style” approach can be useful for the interpretation of not only archaeological, but historical sites.

References


Nature Before Nap Time: Cultivating Community in One Hour, Once a Month

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Abstract
Explore best practices for encouraging children ages five and under to not only play in nature but play WITH nature. Share ideas about creating programs for toddlers, while understanding the target audience also includes multigenerational caregivers. Our "Littles" program addresses our community's need of: providing toddlers with experiences in nature, getting families out of the house, and facilitating social opportunities for caregivers. Find out how one hour, once a month can meaningfully impact your local community, touching the hearts of children and adults alike.

Introduction
Big Break Littles is one of the most well attended programs Big Break Visitor Center offers. The program immediatly caught the attention of families and has maintained popularity. We now serve an average of 100 participants per program. During this session we'll take a quick dip into the foundations of effective programming for young children. This will include receiving printed resources, exploring different stages of cognitive development and sharing personal experiences from the field. You'll discover how quick and simple program preparation can be to inspire playing with nature. Providing a "Littles" program to serve families has had a ripple effect on our participants, park staff, volunteers and community. We'll discuss the most important and unexpected lesson learned as a result of Big Break Littles. Session participants will be provided with outlines, topic lists and given an opportunity to brainstorm program ideas with others. When you leave this session you will feel confident and prepared to create a "Littles" programs at your own park.

References
Big Ideas, Little People

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Summary
Best practices for presenting to very young audiences include self-directed exploration and engaging multiple senses. Is there room in these dynamic programs for introducing big ideas, such as environmental stewardship and native cultures? Review of case studies, program evaluations, and social science shows potential impact of “big” messages in early childhood programs. Use of strategic and developmentally-appropriate values opens doors to including more content in meaningful ways when working with their youngest audiences on important mission-based cultural and environmental themes.

Introduction
My career as an interpreter has provided many opportunities to explore best practices around presenting potentially tough topics. Early on, I was able to participate in National Network for Ocean and Climate Change Interpretation workshops, which exposed me to the work of FrameWorks - a social science institute that studies the effectiveness of various universal values in climate and social science messaging. Using values such as innovation and interconnectedness, I became hooked on the strategic use of values to inspire action. Grabbing every opportunity to put these techniques to the test, I have collected evidence on how to use values to message “big” topics, such as climate literacy and social justice, pre-schoolers and early elementary audiences.

Is It Appropriate?
Early childhood educators have an inherently complex yet rewarding job: building programs to provide important entry-points to our sites’ resources through safe, multi-sensory environments. We often reference a model to accomplish this that leads from simple exposure up a staircase of knowledge through love and to protection of our resources. But looking beyond this we find another model. In this model, unabashed messaging of topics such as climate literacy and social justice at an early age is the appropriate entry point. Social science studies demonstrate that early learning on these topics help normalize sensitivity to the issues, allow us to avoid working against already-ingrained misconceptions, and most effectively help us support development of morals in line with our missions. Work such as that done by Graduate Student Róisín Magee – who studied the effectiveness of values in environmental stewardship programming for preschoolers – demonstrates a positive change in 3–5 year-olds attending a single program.

Inspirations
What better way to develop a strong moralistic program than to focus on intangibles/values? Building off of FrameWork’s suggested best practices, lessons learned by Róisín Magee, and our own experiences and knowledge, staff at Coyote Hills Regional Park is offering a pre-K native cultures program and a K-2 program about local native cultures and water conservation. Both have shown to be effective at both inspiring problem-solving around water issues, while at the same time ensuring students walk away knowing native peoples are still here today. The commonality between the programs in these studies is the use of strategic, developmentally-appropriate values. The values of community, sharing, and ideas in particular have proven to overlap FrameWork’s proven values while offering messaging appropriate for young audiences here at Coyote Hills.

Conclusion
As interpreters, we connect audiences to our sites’ missions, and we have evidence that it is never too early to start with messaging around our biggest themes. While I have found commonalities in successful early learner programming to this end, perhaps the best commonality is the consistently positive audience feedback. It has been found that it is entirely possible to talk about big issues with little people while also having a whole lot of fun.

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It’s Hard to Say Goodbye: Ending Partnerships Gracefully and Starting New

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Abstract
We’ve all been there – a relationship that started out wonderful and then somewhere along the way something changed and it’s no longer working for you anymore. The same thing happens in the world of partnerships. How do you know when a partnership isn’t working for you anymore? When is the right time to call it quits? And how do you move on after the “break-up”? Join us for a fascinating case study into the world of partnerships as we delve into these questions and more!

Keywords
partnerships, mutually beneficial

We’ve all been there – a relationship that started out wonderful and then somewhere along the way something changed. The same thing happens in the world of partnerships. How do you know when a partnership isn’t working for you anymore? When is the right time to call it quits? And how do you move on after it’s all over?

Join us as we delve into these questions and more! Strong partnerships are the cornerstone of so many of our interpretive programs. With declining budgets, they become vital to helping us accomplish our missions and goals. Sometimes, though, they don’t always work out the way we want them to and we may find ourselves in challenging situations. This case study will present what happens when partnerships are no longer mutually beneficial.

Through lively conversations and active audience participation, we will present a case study that walks participants through the process of identifying problems, when to make “the call” and how to move forward after a “break-up”. 
Making Interpretation Relevant to a Changing Leadership

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Abstract  
In the midst of organization and leadership changes, interpretation can easily become relegated to a dark corner. What steps can interpreters take to promote interpretation as a management tool to new leadership? During this case study we will explore the steps California State Parks is taking to elevate interpretation to equal footing as a core program area, and educate a changing leadership on its relevance.

Introduction  
In the midst of organization and leadership changes, interpretation can easily be overlooked or relegated to a minor role. While undergoing an organization structure transformation and shift in leadership classifications, California State Parks is implementing changes to reflect the mission, strengthen interpretation as a core program, and prepare a new class of park leaders that view interpretation as a management tool.

A Core Program  
The development of core program standards for interpretation was a first step in the process. The interpretation core program standards establish what a quality district interpretive program should look like including roles and responsibilities. These new standards will guide management and planning decisions as park districts build out their interpretive programs and increase the diversity of both workforce and programming. We will examine the new interpretation core program standards, their purpose and relevance to management, and achieving diversity goals through planning.

Future Leaders  
With the opening of the district superintendent position to non-law enforcement personnel for the first time, California State Parks realized the need to prepare a new generation of future leaders. California State Parks piloted its new Parks Leadership Development Training Program in 2016/2017, training participants from a variety of classifications and disciplines, including administrative officers, environmental scientists, and maintenance chiefs. We will explore the techniques used to educate new park leaders on effective interpretation program oversight, its role as a management tool, and relevancy across disciplines.

Conclusion  
The processes staff have undertaken to promote interpretation in a changing climate and the lessons learned provide an example for others as California State Parks took a look inward in order to highlight the important role the profession has as a core program. Through practical examples, hands-on activities, and discussions the participants in this session will learn some of the techniques used to educate new leaders on using interpretation as an effective management tool and understand the efforts to elevate interpretation as a core program.
Taking Your Site Virtually to Students through Skype in the Classroom

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Abstract
Dinosaur National Monument has used the innovative distance education program known as Skype in the Classroom since 2015 to connect thousands of kids from around the world to dinosaur fossils. As a remote park on the Utah-Colorado border with limited resources, Dinosaur NM utilized existing partnerships, free software, cell networks and low-cost equipment to create and conduct Virtual Field Trips. The park is able to conduct programs on-site rather than in a studio and can cover a wide range of topics. In this presentation, staff from the monument will demonstrate a live portion of the program, discuss our experiences using the program, and provide information on how your site can join.

Introduction
One of the primary features of Dinosaur National Monument is the preserved face of a cliff embedded with over 1,500 dinosaur bones from the late Jurassic period. This cliff face is contained within the Quarry Exhibit Hall. In 2015, staff at the monument were approached by Skype in the Classroom coordinators to provide Virtual Field Trips. Because the Exhibit Hall is enclosed, Dinosaur's distance learning program is different from other parks that are doing studio-based programs. With the use of an iPad and cell network, staff are able to conduct programs using the actual on-site fossil resource to discuss a wide range of topics such as dinosaurs, fossilization, past ecosystems, geologic time, evolution, extinction, and adaptation.

Engaging Youth Through Distance Learning at Dinosaur National Monument
Over the winter of 2015/2016, staff at the monument experimented with providing Virtual Field Trips to the Quarry Exhibit Hall through the Skype in the Classroom program provided on the Microsoft Education Portal. The demand was overwhelming. All dates were quickly booked and over 100 requests for distance learning programs were unfulfilled due to lack of staffing. This was our inaugural year with no advertisement of the programs. By May 2016, we provided 48 programs to 1,540 students.

Staff continued the programs over the winter of 2016/17. As we expected, there was even more interest in our virtual field trip as the Skype in Education program continues to grow. Programs reached into schools across the country including inner city Atlanta, New York City, Boston Public Schools, rural Oklahoma, Seattle suburbs and even above the Arctic Circle to Fort Yukon, Alaska. We also conducted several international programs this year including students from Canada, England, Portugal, Turkey and Malaysia. As we have discovered, it is not only US students that are excited to learn about dinosaurs. By the end of our Skype season this year, we had traveled 233,914 virtual miles, with staff giving a total of 130 programs to 3,850 students and teachers in 31 states in the United States and six other countries. This model could be replicated at many other sites around the country.

Teach the Teachers
In 2016 monument staff were requested to conduct four programs for classes of teachers to introduce them to the concept of virtual field trips. 63 teachers were introduced to virtual field trips and Dinosaur National Monument. All expressed excitement at being able to provide this opportunity for their students.

Relevancy, Diversity, and Inclusion
The distance learning program has allowed Dinosaur NM and the NPS to reach out to diverse populations and engage new audiences in a unique way that goes directly to the student instead of the student visiting the park. Removing the restrictions of travel and limited time in school provides new opportunities to connect with students from around the world and teach them about this great resource. The Virtual Field Trips are designed to be interactive and based on the feedback from teachers and even cards from students, the interaction between the ranger, students, and the resource through technology have lasting impact. Programs have been primarily designed using science standards for fourth grade students but can be easily adjusted to meet different age ranges and teacher needs. Programs have been conducted for students ranging from kindergarten to adult learners.

Here are just a few comments that were posted online about our virtual field trip:

This was the perfect ending to our Dinosaur unit. The students were able to expand on their learning and to see their learning in action. Amazing!!!! Katie F.

This was absolutely AMAZING! My first grade students were so engaged and triggered to ask really deep questions. Highly recommend this for all learners! The conversations about dinosaurs, fossils, and even state lines (Dinosaur National
During the summer of 2017, monument staff have had several instances where kids or their parents identified that they came to the monument because of a virtual field trip their children experienced. While this has only occurred a couple of times (that we know of), it does speak to the power that even a virtual field trip can have on a student.

**Conclusion**
Based on our experiences, the Skype in the Classroom program has proved to be a successful way to expand the reach of the monument’s education program. With limited resources such as staffing and funding, Dinosaur NM utilized existing partnerships, free software, cell networks and low-cost equipment to create Virtual Field Trips. Staff from the monument have also worked with other NPS sites to assist in the development and launching of their virtual field trips. The Skype in the Classroom program provides opportunities to develop a broader constituency for a site and make connections with students around the globe.

**References**
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Engage volunteers to address maintenance backlog: An inter-disciplinary approach

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Abstract
Do you have a lot to do and not enough time to do it? Of course you do! Find out how an over-booked media specialist engaged volunteers in meaningful work and got more than 200 waysides spiffed up for the NPS 2016 centenniel. And how you can do it too!

Introduction
Volunteers tell us they want meaningful projects to do. Congress tells us they want the National Park Service to address its maintenance backlog. Your boss wants you to get everything done RIGHT NOW! What’s a dedicated employee to do?

Working with volunteers
Harpers Ferry NHP has more than 225 outdoor wayside exhibits. Birds, weather and normal wear and tear have done their damage. Fortunately this park has back-up panels for almost all of the outdoor exhibits. The 2016 centenniel presented the perfect time to replace worn panels with fresh ones from storage. But who had the time to do the work? Maintenance staff was completely booked. I was booked. Everyone agreed it was a good idea but no one had time. Enter the Volunteers in Parks program. I worked with the volunteer coordinator to create an inter-disciplinary approach to exhibit cleaning and panel replacement. The volunteer program used my job description to recruit team leaders. I worked with our landscape architect to train the team leaders how to clean and replace wayside panels and to document their work. I certified the team leaders in the different styles of exhibit replacements. The team leaders recruited crews and managed the cleaning and replacing schedule.

Conclusion
By the end of the year more than 100 exhibit panels were upgraded and nearly all 225 waysides had been cleaned. Volunteer crews remarked how much they appreciated doing something other than just trash pick up. Crew leaders gained valuable job experience in team leading and project management. And park visitors got much improved exhibits to see.
Facilitating Interpretive Opportunities Through Digital Media

Abstract
Share your experiences with digital media, ask questions, and discover how Yellowstone National Park manages a wide array of digital tools that work in concert with traditional interpretive tools to provide a full range of opportunities for visitors—virtual and in-park—to connect with the places and stories of America's first national park. Learn about some challenges, lessons learned, and tips for managing this vital space to reach a truly global audience.

Digital Everywhere
Websites, social media, apps, interactive exhibits, virtual tours, webcams, live-streaming programs, digital displays, podcast, and more! The digital world surrounds us and permeates our society. Never before have the places and stories we interpret been so accessible. People all across the world can appreciate, participate in, and share these places and stories.

How do we harness this digital world to facilitate never before possible interpretive opportunities about—and often in—places and stories that are rooted in the physical world? How do we coordinate with traditional interpretive tools—ranger programs, print media, and conducted activities—to provide a full range of opportunities for visitors to connect with these places and stories?

Empowerment Through Sharing
During this discussion-based session, share how you interpret in the digital space, ask questions you have about digital media, and discover how Yellowstone National Park manages these digital tools to meet people where they are, provide the information they seek, and facilitate new—digital—ways of engaging with the park.

We’ll share our experiences maintaining and upgrading exhibits across eight visitor centers, developing a place-based app for a place that is devoid of cell coverage across the majority of the park, coordinating social media and web messaging with different groups within the park with different missions, developing accurate and timely content to feed and update all of our interpretive efforts, streamlining the flow of those content updates, providing valuable interpretive materials to commercial guides using technology, and meeting the needs of a shifting visitor demographic.

Everything is fair game: discussing best practices for managing media assets; exploring how we coordinate updates to the park newspaper, website, and app; delving into the topic of emerging technologies we’re experimenting with; and working on ways we can work together on new projects!

Enhanced Facilitation
Technology has made it possible to access nearly every space, every story, and every person on earth. Finding ways to coordinate the use of new and traditional interpretive tools can save time, open up new opportunities, and facilitate a greater number of people experiencing your site and the stories found there.

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Leave No Trace for Kids: Research Shows It Works

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Keywords
Leave No Trace, environmental education, attitudes, youth

Abstract
The authors explored the influences of a youth-focused Leave No Trace educational program on participants’ attitudes, behaviors, and nature connectedness. The study employed an experimental, equivalent control-group design and included survey and direct observation measures. Pre- and post-test surveys provided self-report measures of attitudes and nature connectedness, while direct observations examined participants’ behavior toward keeping or leaving objects found in nature. Participants who received the PEAK educational program reported positive attitude changes above and beyond participants who did not receive the program, and left found objects more often than those in the control group.

Introduction
Youth participation in outdoor activities has been on the decline over the past decade, a trend that has been linked to myriad mental and physical health issues among children. As a result, today's youth have earned the label by some as the generation of indoor children (Louv, 2008). Efforts are under way on a national level to break the pattern and get children outside and actively engaged with the natural environment. Recognizing the need to introduce young people to the outdoors while facilitating development of an environmental ethic of care, the Leave No Trace Center for Outdoor Ethics (the Center) has developed a youth-focused program to promote environmental awareness and stewardship of the outdoors (Miller, Shellman, Ramsing, & Lawhon, 2014).

Developed in 2001 by the Center, the Promoting Environmental Awareness in Kids (PEAK) program is used by outdoor educators around the world to teach children the skills necessary to make responsible decisions when recreating in the out-of-doors (Miller et al., 2014). While the program has been in existence for many years, little is known as to the effectiveness of its message. Only one empirical study has been conducted to date, which measured only changes in knowledge of Leave No Trace as a result of participation in PEAK (Miller et al., 2014). This study builds upon and moves beyond this line of research by extending the focus to examine changes in attitudes and actual behavior as a result of program participation.

Study Purpose and Methods
The purpose of this study was to examine the efficacy of a Leave No Trace education module for youth designed to teach the Leave No Trace Leave What You Find Principle, and its associated recommended practices. Specifically, the study explored the relationship between participation in the educational module and changes in attitudes, intentions, and behaviors. Pre- and post-test surveys measured attitudes and behavioral intentions, while observational measures captured data related to actual behaviors regarding found natural and cultural objects. The results of this research are intended to provide guidance for the enhancement of existing, and development of future, Leave No Trace programs for youth. They also provide further support for the value and importance of outdoor ethics education programs for youth.

Thus, the essential question being asked in this study is how might the inclusion of a focused Leave No Trace educational program foster further attitude and behavior change among ODS participants? The results of this study advance understanding regarding this unexplored concept.

Results
Overall, both the control and treatment groups reported attitudes that are generally in line with the Leave What You Find Principle. However, those in the treatment group showed a tendency for attitudes that were more in alignment with Leave What You Find practices. As such, there were some interesting trends in the data that are worth discussion. For some behaviors, both the treatment and control groups reported statistically significant changes in attitudes to better align with Leave What You Find, while for other behaviors there were no statistically significant changes. Further yet, in some instances attitude changes were observed in the opposite, unanticipated direction (i.e. in less agreement with the Leave What You Find Principle).

Additionally, the observation data provide further evidence toward the influence of the PEAK module. Overall, groups who
participated in the module were less likely to remove objects from nature than were groups who had not participated. Control groups were observed to keep objects 71% of the time, while treatment groups removed them just 60% of the time. Those groups who participated in the Leave What You Find module did in fact leave objects in place at a higher rate than did the control groups. Moreover, the module utilized in the study was approximately 30 minutes in length and broadly covered the Leave What You Find concept. There was no mention of the specific study objects in the curriculum. Therefore, it appears students were able to connect general concepts learned during the PEAK module to more specific behaviors related to naturally found objects.

Discussion
A common critique of Leave No Trace is that it creates a dichotomous relationship between humans and nature, where humans are ‘apart from’, rather than ‘a part of’, the natural world (Simon & Alagona, 2009). Related to the Principle of Leave What You Find, the argument continues that collecting an object found during an outdoor experience, such as rock or shell collections, can serve to foster deeper connections with nature and provide a motivating factor to visit nature again. Thus, by espousing a Leave What You Find philosophy, Leave No Trace is inadvertently minimizing opportunities for nature connectedness in youth. However, our findings related to nature connection provide evidence to the contrary.

In this study, the finding of unique objects generally resulted in high levels of engagement by the study participants. While objects were kept more often than not, the majority of participants indicated that taking home an object found in nature is not an important part of the overall experience; on the whole, children tend to disagree that taking home an object found in nature is an important part of the experience. This was true for both the treatment and control groups. However, those who participated in the Leave What You Find module were significantly more likely to evaluate taking home an object as unimportant.

Conclusion
This study provides a unique addition to the scientific and professional literature on parks and protected areas, and the limited body of literature on alternative management practices for reducing outdoor recreation-related impacts in parks and protected areas. This is the first study to examine pre- and post-attitudes, behavioral intent, and actual behaviors toward Leave No Trace, and specifically Leave What You Find practices with youth. The results of this research provide guidance for the development of future Leave No Trace programs for youth. They also provide further support for the value and importance of outdoor and EE programs for youth.

References


The Experience Economy: Trends Impacting Interpretation

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Abstract
The Experience Economy is alive today. Polling data and trends research shows people (especially Millennials) prioritize spending money on experiences instead of material goods. What do these shifts have to do with interpretive sites and settings? Could we take advantage of these trends to expand our audiences and members? After all, We ARE in the experience business! Let’s capture this momentum and attract visitors to our sites by doing something different with the familiar.

Introduction
We live in the time of the Experience Economy (a concept developed by Joseph Pine & James Gilmore in their book by the same name). Polling data and trends research shows people (especially Millennials) today are prioritizing spending money on experiences instead of material goods. Retail is in a major state of flux due to changes in technology but also in consumption patterns. Shifts in driving, car ownership and home size have also been documented in urban areas. What do these shifts have to do with interpretive sites and settings? Could we take advantage of these trends to expand our audiences and members?

Implications for the Visitor Experience
With words borrowed from technology (user experience - UX) and retail (customer experience), interpretation has expanded to be part of the visitor experience - a broader overall concept that takes into account the total experience - a decision to visit, the means to travel, ability to find your way, visitor comfort (food and restroom), engagement with the setting, site and/or employees and, if we are lucky, a continued connection using social media to encourage a return, become a member or to volunteer.

Interpretation is in the experience business – our sites and settings have the REAL things – historical objects, original paintings and sculpture, a house where history was made, live animals that move in wild settings, plants that can be touched and tasted, food that can be smelled and eaten. Today our culture is often information rich but experience poor.

How do we harness the trends to enhance interpretation and make a stronger connection to our visitors? Current trends research available on the web has implications for interpretive settings if we approach the process with an open mind. How does the trend for co-creation impact what we do? How can we involve visitors in program and exhibit development? How do other sites or settings develop innovative practices that enhance the visitor experience?

If we look to the business world – especially the hospitality industry – we find examples that could provide interpretive sites and settings ideas for engaging their visitors. Hotel brands such as Kimpton empower local managers to develop unique programming that helps their guests to feel more at home and become part of the hotel’s community for the night – a wine tasting reception in the lobby with local wines or a watercolor painting gathering in mid-afternoon.

The Hopservatory http://www.worthybrewing.com/hopservatory.html recently opened by Worthy Brewing in Bend, OR provides a venue for drinking beer at a brewery while also gazing at the heavens through their new observatory. “Imagine being able to enjoy a cold beer and then traveling back millions of light years in time!”

To build new audiences when the Museum of History and Industry in Seattle, WA moved into a new neighborhood, pub trivia nights were developed in local pubs focused on Seattle’s history http://helendivjak.com/pub-quiz/. Once the move was made, trivia nights were moved into the museum along with the beer!

A botanical garden in the U.S. Midwest added a twist to a book reading by Amy Stewart, author of The Drunken Botanist (a book that makes the fascinating connection between plants and alcohol) by adding a hosted cocktail hour following her reading. Imagine learning the source and history of your cocktail while you imbibe!

Let’s challenge ourselves to address the public’s interest in experiences by changing an existing program or visitor activity to make it more experiential and unique. Engaging visitors using experiences will be memorable, help us develop new audiences and could bring in new revenue.

Conclusion
Interpretive sites and settings can take advantage of the public’s increased interest in experiences by modifying existing programs and developing new programming that provides something unique, hands-on and memorable. We are in the experience business and can leverage that position in the marketplace to grow new audiences. Let’s use some creativity, be innovative and deliver programming that visitors cannot stop talking about!

References
Books

**On-Line**


Done On Time: How to Avoid Costly Schedule Delays When It Matters Most

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Abstract
Why do new buildings and exhibit projects take so long? Why does it seem that schedules always delayed? Can't everyone just do their part to keep things on track? The answer is YES!

New buildings and new exhibits are full of complex details and working relationships. How can you ensure that your facilities will be fully functional by your grand opening? In this session, participants will learn the intricacies of a project's critical path, and which factors might jeopardize or secure a successful, on-time completion.

Introduction
Why do new buildings and exhibit projects take so long? Why does it seem that schedules always delayed? Can't everyone just do their part to keep things on track? The answer is YES!

Body
New buildings and new exhibits are full of complex details and working relationships. How can you ensure that your facilities will be fully functional by your grand opening? In this session, participants will learn the intricacies of a project's critical path, and which factors might jeopardize or secure a successful, on-time completion. All will gain a greater understanding of their role and impact on schedules and will leave with a scheduling tool resource for future project planning.

Conclusion
Time is money. When projects delay it costs more for all parties involved. Even when stagnant, administrative costs are incurred by keeping a project active. Keep your key players on track with tips from this eye-opening session.
The Art of the Family Friendly Campfire

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Abstract
The Art of the Family Friendly Campfire is designed to explore strategies for planning and facilitating campfire programs at the participant's home site. The workshop will explore logistics, content, themes, and challenges of campfire programs. Participants will leave the workshop with an appreciation for the value of campfires while learning good strategies to manage them.

Introduction
The traditional campfire is a sacred thing. A place where humans have gathered for warmth, cooking, light, and protection since prehistory. In fact, there is evidence from a South African cave that the first controlled campfire was built over a million years ago. Technology as we see it today would not be possible without fire. Technology, however, can often shield and distract us from the simple joys of a campfire's flames. It should be our mission as interpreters to use campfires to provide the public with positive and safe experiences.

The Art of the Family Friendly Campfire
The workshop will begin by discussing how fire is used at the presenter's home site, Dodge Nature Center. Fire building is an activity used for survival classes in 4th grade and up. Students are taught how to construct a fire, given a talk about safety and "common sense" and a strike anywhere match. If time allows, they may be challenged to boil water or cook s'mores. Dodge also utilizes fire as gathering and warming spots for our special events, like our Halloween program and winter festival. For visiting school groups there are sometimes formal campfires that serve as story telling or teaching spaces. In addition to all of this, Dodge has been offering public campfire programs on a seasonal basis that offer a specific theme.

A discussion will be offered with the programs participants as to how they may use campfires at their sites. Campfire programs definitely benefit from having a theme. Is the theme to learn about the summer solstice? Is it to learn cooking methods? Share stories and songs? Giving the audience an expectation about what is to happen at the fire is important to its ultimate success.

Campfires have an effect of bringing people together, but managing a campfire group is much like managing a classroom, there must be rules! Giving an introductory safety talk is paramount for a successful campfire program. I like to use the term "common sense" I tell my audience that they all know that fire is hot and can be unsafe, and that the campfire ring is there for a reason! It is often when cooking or roasting is taking place where safety concerns are the most present. This is when it is most important to monitor.

Our workshop will include examples of excellent campfire activities, including those that keep participants moving, such as repeat after me songs and interactive stories. There are also many excellent games to share. Discussion will include resources to find these activities.

Conclusion
An ideal campfire program will include a theme, some kind of activity, and possibly the chance to cook or roast some kind of treat. These things, along with a well constructed campfire, are recipes for success in campfire programming. Whether you decide to make your program formal or informal in content, offering these programming options will allow participants to enjoy themselves. Share the simplicity of the eons old campfire with your visitors, and they will find nourishment in the activity.

References
Politically Correct for Its Time: Accurate depictions of our history will lead to a better understanding of our world today

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Abstract
Throughout history the “political correctness” of different eras, locations, ethnic groups, policy-making entities, religious and morale dictates have controlled how people treat and control one another. These checks have formatted our heritage in every way from how to greet one another, how to eat, who may, and may not be privileged in their society, and how we may speak, write and publish. Though many believe they know and understand what our society has gone through in its development, in truth much of what we believe “mythinformation”.

Introduction
Throughout time, people have been involved in conflicts based upon ethnic background, race, social status, economics, religion, language, politics, age, gender and many other divisions. Historic sites struggle with how to accurately depict a particular time period and place and yet not offend the audience observing the event or program. Many sites and programs choose to avoid the issues entirely, others highlight politically hot topics and some attempt to rewrite history to fit the “political correctness” of today. Our collective past is the basis for our collective present. As such, the political and social mores of our past have formed the political and social mores of our present. We are unable to change what has occurred and should concentrate on the lessons past mistakes, failures, and successes have taught us.

Preparation is the Key
Preparation of the program, the interpreters and the audience is the most crucial element in acquiring this goal. For historic sites the first questions in planning should be:

What is the mission of the interpretation?
Will the audience benefit from the program?
Can we afford the program fiscally, and just as importantly, in terms of time and emotional involvement?
Do we need to do living history?
If so, should it be in a First Person Format?

Do we have the time, space, and personnel to adequately prepare the audience?
Once these questions have been answered, and it is decided to continue, the following needs to be accomplished. Be professional! Utilize the same standards and interpretive guidelines that would be used in any interpretive presentation, whether it is a static or interactive program. Develop strong themes, goals and objectives or a marketing plan, and continually evaluate your program all during its development. The program needs to be prepared using these benchmarks.

What is the time period being depicted?
Where is the locale?
What are the social and economic situations involved?
What ethnic groups are involved?
What genders are involved in the depictions?
What are the ages of the participants?
How established is the individual in the community?
Is the community based on a religious or ethnic foundation?
Who is in power?
What are their doctrines?

The interpreters need to be extensively trained in their roles. Each should be aware of their social and economic representation and how they fit within the interpretive program. The “political correctness” of the time should be taught based upon the era being depicted, the locale, social, economic and ethnic backgrounds of each representation, the different rights and privileges based on ethnic backgrounds, age and sex, who is in power, why these aspects are in play and what the outcome is from the period. The interpreter needs to be trained in these conditions so their representation is natural and normal in execution.

Avoid the uncommon. It does not fairly represent the past. The audience must be prepared. They must be made aware, whether by fliers, pre-program talks, films, and so on, that they are about to enter a different time period with a different set of “politically correct” standards and ethics and a different culture.

The public needs to be informed that the interpretation is an historic representation and not a promotion for any particular beliefs or standards. Allow the audience to participate in some manner. To be left out of an historic program promotes discontent and dissatisfaction.

Without proper preparation, the program, the interpreters and the audience will all be cheated of an authentic quality interpretive program.

If We Do It, Will They Come?
The presentation of historically correct material that is potentially controversial can be intimidating. The fear of offending even one person, valid or not, can discourage innovative programming.
However, audiences are becoming better educated and studies indicate they are wanting and seeking programs that are authentic and accurate in their presentation. Preparation of the audience is key to a program’s success.

Costumed interpretations that illustrate a more accurate portrayal of our heritage are garnering larger and more receptive audiences, and they set the standards for other sites and programs.

**Conclusion**

With proper training and a professional approach, cultural and historic programming does not need to shy away from controversial topics and accurate portrayals of the past. Sites do not need to sell themselves into inaccurate histories and misrepresentations. Promoting a better understanding of past cultures and histories permits the audience to amended misconceived beliefs of the past and to improve their understanding of what changes have occurred in our historical heritage that bring us to our present awareness and concerns with the past.

Allowing ourselves to honestly portray the past will allow our audience to better understand our history and our present.

**References**

Crafting an Inclusive History at African American Sites

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Abstract
Each winter, a select group of people from African American sites across the nation gather in Charleston, SC to participate in a 7 day workshop that explores how to use interpretation to tell a more inclusive and accurate American narrative.

Crafting an Inclusive History at African American Sites
A joint effort by the National Museum of African American History & Culture, Association of African American Museums, Charleston County Parks, and NAI, the intensive workshop is meant to equip museum professionals with interpretive tools to increase the impact of their sites on their communities and the country. In addition to a CIG workshop that is tailored to the interests of the group, participants explore racial identity, self-identity, prevailing American narratives, counter-narratives, and how to recognize cognitive dissonance in museum and historic site settings. Strategies to assist visitors to incorporate new information into their view of themselves, American history, and world history are examined. The realities of interpreting difficult histories as a person of color are also discussed. Site visits compare and contrast how interpreting slavery and its aftermath is done or not done in Charleston.

Conclusion
This workshop incorporates the NAI CIG model and goes beyond it to address issues for people who regularly interpret histories that are often not included in the American narrative or, if included, the histories are obfuscated or suppressed.

References


Rain or Shine: Benefits of Heritage Interpretation Outdoors

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Abstract
Outdoor heritage interpretation allows interpreters to “think outside the box” by providing learning opportunities outside of formal museum and exhibit settings. In this session, presenters will focus on case studies from their personal experience to explore challenges related to incorporating universal design, appealing to broad audiences, incorporating multiple stakeholders, and wayfinding in urban areas with complicated spaces. Participants will leave the session with a better understanding of the basic principles of heritage interpretation, be encouraged to pursue opportunities to bring the past beyond museum walls, and learn how creative design and techniques can make history relevant to a diverse audience.

Keywords
Heritage, Outdoors, Design, Signage, Exhibits, Programs

Introduction
What we learn about the past connects us to a larger experience that provides perspective, depth, and insight into our own lives. Interpreting heritage resources is thus fundamental in connecting people to a shared history. Most members of the general public would undoubtedly mention exhibits, classrooms, libraries, or video documentaries if asked how they might learn about the past. While effective in their own right, museums, books, and non-fiction films about history represent a more traditional method of heritage interpretation. Outdoor heritage interpretation, as an alternative to these formal approaches, offers unique ways to both reach new audiences through various education strategies and present “worn out” historical narratives in exciting, modern ways. In Pensacola, Florida, outdoor heritage interpretation projects initiated by the University of West Florida (UWF) Historic Trust and the Florida Public Archaeology Network (FPAN) have helped breathe new life into the city’s heritage tourism mission. With planning, design, and implementation methods that can easily be translated elsewhere, these interpretive projects provide ideal case studies for the inherent opportunities and challenges created through outdoor heritage interpretation.

Designing for the Outdoors
As heritage tourism increasingly becomes a part of Florida’s tourism industry, the Florida Public Archaeology Network (FPAN) and UWF Historic Trust have recognized the need for heritage interpreters to design new programs and learning opportunities that meet the modern demands of an experience economy. Over the last two years, three projects have stood out as exemplars of both organizations’ efforts to bring interpretation outside and into the 21st century.

One of the FPAN’s most successful outdoor interpretive programs has been its semi-annual bicycling tour of Fort Pickens at the Gulf Islands National Seashore on Santa Rosa Island, Florida. The program begins with a short presentation that leads into a bicycle tour with multiple stops along a safe, designated trail. At each of the stops, FPAN archaeologists describe nearby archaeological sites, pass out photos of artifacts or historical images, and try to connect the audience to those individuals from the past who stood on the same ground however long ago. Similarly, Gulf Islands National Seashore interpretive rangers provide insight on the local environment, including identifying flora and fauna along the way. Intended to be a collaboration among experts from both FPAN and the National Park Service, “Tour de Fort” exemplifies the benefits of partnerships among federal and state-level organizations to produce exceptional outdoor programming.

Toward creating a similar type of “tour” in downtown Pensacola, UWF Historic Trust and FPAN have recently cooperated to establish the “Commanding Officer’s Compound” outdoor exhibit. This exhibit lies within the footprint of downtown Pensacola’s colonial fort, occupied by both the British and the Spanish at different times between 1756 and 1821. After conducting excavations in the 1980s and 1990s, archaeologists discovered the remains of an area within the fort once occupied by its Commanding Officer. Archaeological discoveries included an outdoor cooking oven, a British-era well, a small cellar complex, and the food remains of animals like sea turtles and alligators. For an almost 300-year-old fort in a busy urban area, the largely intact archaeological record at this site offered the UWF Historic Trust a unique opportunity to provide visitors a glimpse into their past.
A final joint outdoor interpretation project was to design and install a new Maritime Heritage Trail along the length of the Pensacola waterfront. For this project, UWF Historic Trust and FPAN applied for and were awarded a National Park Service Maritime Heritage Grant. The grant provided funds to design and install 16 individual wayside signs along 1.5 miles of the city's bustling, pedestrian-friendly waterfront. Each of the wayside signs features a different aspect of local maritime heritage and nearly all include recent archaeological research and relevant material culture. The content on each sign is research-driven, but intends to connect to its outdoor audience through highly visual content and thoughtfully worded interpretive text.

**Challenges and Pitfalls**

Like their more traditional counterparts, outdoor interpretive projects also involve challenges for their designers and implementers. Effectively interpreting to multiple audiences, making programs accessible, and navigating complicated bureaucracy are just a few examples of potential pitfalls for project managers. One of the greatest challenges for each of the projects mentioned above was the need to be conscious of the fact that different stakeholders often had different expectations for outcomes or had varying needs. The “Tour de Fort” bicycling tour, as a collaborative program with the National Park Service, needed to fit into pre-existing interpretive schedules without competing for participants or resources. In the case of the Commanding Officer’s Compound and the Maritime Heritage Trail, archaeologists who took part in original excavations of the featured sites often wanted to bring archaeology to the forefront of interpretation. Interpreters, however, felt the need to balance often-dense data with more publicly appealing verbiage and imagery. The City of Pensacola and the Florida Department of Transportation raised additional concerns on the Maritime Heritage Trail project about sign placement and implementing installation procedures that could work with existing infrastructure along right-of-ways and city parks. Interpreters, however, needed to consider other important aspects of placement like ADA accessibility and child-friendly heights. Though these are just a few examples of stakeholder issues, projects designers and managers can often navigate these challenges with creativity, flexibility, and diplomacy.

**Conclusion**

By bringing heritage learning outside, interpreters embrace new means to be effective in their mission to connect with audiences. Outdoor educational experiences can be engaging, modern, and create deeper meaning with the landscape of the past. Looking toward the experiences of other organizations like the UWF Historic Trust and the Florida Public Archaeology Network (FPAN) can provide practical insight about preparing outdoor programs and projects. Learning from what has and has not worked can also assist with navigating common issues. Though the time and energy that interpreters must put into insightful project outcomes can take a great deal of development, planning, and implementation, the benefits of outdoor heritage interpretation are well worth the effort.

**References**


Nature Centers: Staying Relevant, Achieving Impact

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This is an edited version of the article of the same name published in Directions, The Journal of the Association of Nature Center Administrators, Fall 2016. The full article and the research from Andrew Revelle, is available through the ANCA website; www.natctr.org.

A recent study of nature centers included surveys and interviews of emerging and seasoned nature center leaders. Commissioned by the Association of Nature Center Administrators, the study developed themes and data that represent a potential future and needs of the nature center profession.

Methods
A survey was developed and sent to members (N=559) of the Association of Nature Center Administrators (ANCA). Survey responses returned and included in the data was 166 or 29.7% of the ANCA population. Following the survey, a random and peer nominated selection of nature center directors that either had less than five years (Emerging leaders), or more than 15 years of experience (Seasoned leaders) were identified for interviews. In-depth interviews were conducted with 14 Seasoned and 6 Emerging leaders.

Survey Results: Changes
Respondents predicted changes that will occur in the nature center profession include:

96% Raise funds from new sources, primarily by concentrating on entrepreneurship (earned income) and Legacy (long-term fund raising practices; i.e. endowment, wills, etc.).

77% The Executive Director’s role will include stronger skill sets and experience in business, fund raising, and building external connections.

77% A nature center’s role in the community will become a more active voice for the environment.

76% A nature center will develop more formal relationships with schools to create and provide increased authentic experiences. (i.e. STEM, meaningful re-search, citizen science).

57% A nature center will target audiences that will include more experiences for adults and families, less emphasis on schools.

Survey Results: Correlations
(r-value, +/- .5)

- Increase need for funding = increase staff .67
- Increase need for funding = new sources .66
- Increase educational staff = increase fund raising and public relations staff .52
- Increase public relations staff = fund raising staff .67
- The recent recession will continue to impact strategic planning, staffing, and fund raising. .67

An interpretation of the staff correlations might mean there will be more cross over functions required of educational staff to be more involved in fund raising and public relations, in addition to educational responsibilities. The recession is still fresh in the respondents’ minds and has caused nature center directors to approach strategic directions and fund raising priorities differently than before the recession.

Interview Results: Comparisons
Emerging Leaders are more likely to:
- Be more technology focused;
- Incorporate climate change into programming;
- Collaborate with other non-profits;
- Expand programming beyond schools;
- Connect authentic experiences with programming;
- Volunteer efforts into rehabbing our environment.

Interview Results: Themes
The Future of Nature Centers: A View from the Profession (Revelle, 2015) establishes a set of sub-themes while Nature Centers: Staying Relevant, Achieving Impact (McReynolds, 2016) builds upon those sub-themes to generate four broad themes. These four themes could guide our professional development and strategies for the changing roles we encounter.

A key, single phrase that can sum up the results of the research is Being Relevant. How do nature centers remain (or become) truly relevant in the communities or the regions we serve?

To be relevant, Nature Centers will be:
- Leaders in Conservation and Restoration – Our nature center sites and our off-site projects will reflect best practices and involvement in conservation and habitat restoration. We will not be silent partners but leaders in demonstrating, promoting, educating, and implementing best practices actively throughout our chosen service areas.
- Leaders in Education and Advocacy – Our nature centers will develop and embrace best practices in educational methods that provide authentic experiences that connects with our participant’s real-life situations. Our nature centers will expand our role from education to include experiences that
elevates our role as a leader in advocacy for environmental and related causes and concerns that fit our mission.

- Leaders in Collaborations and Partnerships – Nature centers will actively seek, form, and lead collaborations that will help implement strategic priorities. Nature centers will form true partnerships with other organizations and other nature centers to fulfill broader causes that can only be accomplished through multiple stakeholders working together.

- Leaders in Reflecting Our Community – Nature centers will be leaders in establishing relationships with all members of the community service area and actively obtain involvement from those members as staff, board, and volunteers. The nature center will reflect the diversity of our community in programs and leadership.

Next Steps
We have always considered our nature centers relevant, but the question and challenge is how do we know if the community views our nature centers as relevant. We have learned a lot about our profession and we still have lots to learn but we do have opportunities to dig deeper into why, what, and how we do what we do to achieve the impact of our missions and to be relevant in our communities. As a profession, we have been dedicated to identifying and embracing best practices for the leadership and administration for our nature centers. We are now at the edge of opportunity to establish our local and national impact and relevancy through programmatic changes, evaluation, and professional growth, as individuals and institutions.

References
Complete list of references can be found in the article at www.natctr.org


Connecting People to Meaning Through Digital Marketing

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Abstract
As interpreters, connecting and engaging audiences in real time might be very natural for you. But have you ever considered engaging with your audiences digitally instead of face-to-face? Your digital presence is crucial as today's fast-paced and ever-evolving virtual landscape continues to expand. With a basic digital and social media marketing strategy, interpreters can remain relevant and promote the voices that make them meaningful. This presentation is beneficial to interpretive professionals of all levels, from novice to experienced, due to the high relevance of social media in the contemporary society.

Keywords
social media, digital marketing, engagement, Facebook, Twitter, Instagram, livestreaming, strategy, marketing tools, building connection, marketing tips

Introduction
As interpreters, connecting and engaging audiences in real time might be very natural for you. But have you ever considered engaging with your audiences digitally instead of face-to-face? Now we can connect with each other in ways that were not possible just a few short years ago. Your digital presence is crucial as today's fast-paced and ever-evolving virtual landscape continues to expand. With a basic digital and social media marketing strategy, interpreters can remain relevant and promote the voices that make them meaningful. This presentation is beneficial to interpretive professionals of all levels, from novice to experienced, due to the high relevance of social media in the contemporary society.

Connecting People to Meaning Through Digital Marketing
The current presentation offers insights on digital and social media marketing, featuring channels such as Facebook, Twitter, and Instagram, and their applicability for contemporary interpretive sites and programs. Each social media channel is discussed and presented from the point of view of its relevance to the interpretive audience, general popularity and functionality, as well as the available features each platform possesses which an interpretive site or program can utilize to create a meaningful connection with their audience digitally.

Presenters speak about promoting a behind-the-scenes view of an educational program and use the Bachelor of Educational Studies program at the University of Missouri-St. Louis and its social media channels as a reference point for the discussion. The presentation dwells upon integrating traditional and digital marketing efforts, and gives specific examples of livestreaming, engaging and involving university students to create and curate interpretive content on various social media channels, creating meaningful content to engage with the followers, reaching out to and working with the target audience, as well as building a long-lasting connection with it.

Using social and digital marketing tools requires at least some basic understanding of a social and digital marketing strategy together with the ways how to bring it to life. Specific strategies on how to engage with target audiences in real-time through the effective use of Facebook, Twitter and Instagram are discussed during the presentation. Presenters provide tips on how to get the most of the social and digital marketing strategy, as well as draw special attention to ensuring that the created strategy helps to facilitate, build and strengthen mutually beneficial relations with local communities and potential partners. The presentation is heavily focused on the use of livestreaming on all the discussed social media channels as one of the most effective tools to connect and engage audiences in real time, as well as to reach out to more people which is less possible using conventional methods.

Conclusion
The influence of social media on all aspects of our life cannot be underestimated. Effective use of the most popular social media platforms, such as Facebook, Twitter, and Instagram, as well as building a solid social media and digital marketing strategy is indispensable for contemporary interpretive sites and programs in order to go hand-in-hand with the development of the society. Using new tools is beneficial to get to a new level of connection with the existing audiences, as well as expanding the area of influence and building mutually beneficial relations with the communities.
Relevancy and Community Engagement at California State Parks

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Abstract
2016 marked the launch of the Community Liaison Pilot Project and the History & Relevancy Pilot Project. Both will serve as models that enhance interpretive programming to address inclusion, equity, and access within California State Parks. The Community Liaison project at Los Angeles State Historic Park has developed a promotora group and strong community partnerships. Park staff has expanded their expertise related to effective outreach, engagement, and relevancy. The History & Relevancy Pilot Project aims to explore the many diverse and untold stories, making long-established programs more relevant to our diverse audiences. By 2018, both pilot projects will be transformed into statewide models.

Introduction
California State Parks has embarked on two initiatives to address inclusion, equity and access. The Community Liaison Pilot Project and the History & Relevancy Pilot Project will serve as models that enhance interpretive programming through community engagement and collaborative partnerships.

Expanding Traditional Programs and Reaching Diverse Audiences
California State Parks has been facing the changing diversity of California without an institutional deviation to traditional programs and interpretive offerings. This presentation will offer a look at the major steps California State Parks has taken to tackle these issues.

The two-year Community Liaison Pilot Project advances the development and implementation of an innovative outreach and engagement model for California State Parks. It is being piloted at two state park units and includes scalable curriculum, training and outreach models, and synergistic partnerships that can be replicated throughout the California State Park system. The project team includes a number of core partners including: staff at the Los Angeles State Historic Park (LASHP), the Mountains Recreation and Conservation Authority, Community Nature Connection, UCLA Professors, Vision Y Compromiso, and other local non-profits.

Through this project, California State Parks has had the opportunity to build upon best practices that have emerged from other arenas and adapt them to the operating practices and conditions of park units. Opportunities to be realized over the course of the two-year demonstration project include:

• Developing an effective and cost efficient outreach and engagement framework and operating model that can be brought to statewide scale while being flexible enough to meet the unique needs and conditions at the park unit level.
• Co-production of a park outreach and engagement model that makes best use of external partners’ assets and resources to achieve successful outcomes with improved efficiency.
• Gaining authentic support and buy-in of staff at all levels of service within the California State Park system for new ways of working with diverse users and collaborating with non-traditional partners.

Using the promotora model or community outreach model, Los Angeles State Historic Park now has developed and maintained a promotora group. The group works together with park staff to facilitate community listening sessions, meet and collaborate with local partners, and develop interpretive programs that reflect community interests and needs.

Additionally, through capacity building, training, and project experience, park unit staff has expanded their outreach expertise that will ultimately allow them to be innovation disseminators within California State Parks related to effective outreach, engagement, and relevancy.

2016 marked the launch of the History & Relevancy Project in California State Parks. This project aims to dissect established park programs offered in the majority of the Department’s park units. These interpretive offerings include programs like: Junior Rangers, Living History, Guided Tours & Hikes. These traditional types of interpretive programs have centered around non-diverse themes, characters and topics, many since their implementation. Through this program, California State Parks aims to explore the many diverse and untold themes, making these long-established programs more relevant to the audiences that are visiting parks.
Additionally in this workshop, we will be exploring the Parks Online Resources for Teachers & Students Program or PORTS. This program, established over ten years ago, aims at helping K-12 classrooms teach common core state standards through the context of California State Parks. This program also focuses on Title I schools throughout the state, who often do not have the support in their ever-decreasing budgets for field trips or transportation to parks and open spaces.

PORTS is a distance-learning program using video-conferencing technology to bring programming to schools. Using available platforms like Vidyo, Google Hangouts, and more, students are able to interact live with a Park Ranger or Interpreter in their classrooms. The program covers a number of topics or Units of Study, aligned with current Common Core and Next Generation Science Standards, that can be used to supplement or serve as pre-trip educational opportunities. Topics covered include: desert ecology, art & architecture, kelp forests, immigration and salmon lifecycle. Through PORTS, students receive positive interactions that can lead to greater understanding and positive relationships with unformed staff that can carry on beyond the classroom experience.

Within the last year, PORTS has expanded its reach beyond audiences within California. Through online platforms like Skype and Google Hangouts, audiences across the globe are connecting to California State Parks in a way never done before. Through these interactions, virtual “park visitors” are connecting with park staff, sharing common interests and informing us on what resources within the system are important and relevant to international audiences.

These interactions will help California State Parks continue to move forward towards the goals of revisiting our history and relevancy; and transform the interpretive programs and offerings that have been staples of the system for so long.

**Conclusion**

By the close of next year, the Community Liaison Pilot Project and the History & Relevancy Pilot Project will be transformed into statewide models to increase relevancy and community engagement in California State Parks. Stay tuned for a follow-up presentation at the 2018 NAI National Conference!

**References**


PORTS – Parks Online Resources for Teachers and Students. www.ports.parks.ca.gov


Raising the Bar for Adventure Travel: A new standard for adventure travel guides that emphasizes interpretation

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Abstract
Adventure Travel is one of the fastest growing segments in the travel industry. As with any growing industry, there is concern about maintaining quality and integrity. The adventure travel guide is at the forefront of this conversation and is being given greater attention. In response to this attention, the Adventure Travel Trade Association (ATTA) organized a group from 18 different countries to create a new international standard for adventure travel guides. The group identified 5 core competencies that all guides must possess. Interpretation is one of those competencies and is included as an integral part of guide training around the globe. A key element of this presentation will be techniques used to make CIG content relevant for Adventure Travel guides.

Introduction
The Adventure Travel industry has grown rapidly in the last decade, expanding from an estimated $89 billion in 2010 to $263 billion in 2013 with an estimated four out of ten international travelers incorporating adventure activities into their travel plans. As with any growing industry, there is concern about maintaining quality and integrity. The adventure travel guide is at the forefront of this conversation and is being given greater attention by companies, governments, and associations. In response to this attention, in 2015 the Adventure Travel Trade Association (ATTA) organized a group from 18 different countries to create a new international standard for adventure travel guides. The cohort identified 5 core competencies that all guides must possess. Interpretation is one of those competencies and is included as an integral part of guide training around the globe. A key element of this presentation will be techniques used to make CIG content relevant for Adventure Travel guides.

Conclusion
Destinations around the globe are craving for content delivery methods like thematic interpretation. Adventure travelers are demanding that their guides be knowledgeable of local history, relevant natural history, and generally be able to effectively deliver
this content. Overarching concepts of interpretation transcend industry, but there are specifics that separate travel from other fields harnessing interpretation. NAI has a unique opportunity to address this large and growing industry with tools and resources that would be beneficial to the travel industry, as well as grow the pie of interpreters globally.
Illuminating Energy: How to Interpret Hydropower for Young and Old; Getting Electricity from our Powerhouse to Your House

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Abstract
We in America take it for granted that we can flip a switch and have electricity do something for us to make our lives comfortable. At the same time, we are getting more aware of the impacts producing electricity has on our environment. How do you take the abstract process of energy production and communicate it in such a way that visitors young and old can understand it? How do you encourage responsible use of electricity? How do you use interpretive principles to get your message across? This session will give answers to these questions and show a fun interactive way to interpret the process of hydropower production. The method we use can be easily transferred to other energy processes.

Introduction
How do you demonstrate the fundamentals of electrical production in a fun and interactive way? Get your audience involved in each step of a difficult-to-visualize system so they can understand the process for themselves.

This is a hands-on, interactive program about how the parts of a hydropower generator work together to produce electricity and how the Northwest power grid functions to distribute electricity. Interpreting the process of electricity production can be daunting, but we have developed creative ideas to get the job done. We use interpretive principles such as universal concepts, physical props and movement, and tangible/intangible concepts so the audience can relate to what they are learning as we reveal the inner workings of machines that make our lives more comfortable.

We also want to spark curiosity and interest about the impacts electricity production methods have on our environment and how each of us can make choices about energy efficiency. Where does our electricity come from? How can we all use less?

The prop-bag program template can be used to develop a program of your own to facilitate audience understanding of complex topics or systems that have several steps from start to finish.

Program Script Framework for “Hydropower in a Bag”
In the following script, when you see *Prop* it means show the prop and hand out prop to audience participant.

How does a hydropower generator work? How do you begin with water flowing through a powerhouse and end with electricity flowing out a wire from the roof?

*Bottle of Water* It all starts with falling water. Hydro=water, power=electricity. So how do we use water to make electricity? The falling water moves through the dam.

*Concrete Chunk* Dams are built of something strong, like concrete. Dams make the water go where we want it to, to do the work we need it to do.

*Pinwheel* The water is directed to the first moving part, the turbine. We use the power of falling water to push the turbine and make it spin. We need the the turbine angled just right (hold pinwheel at appropriate angle for your facility) to take advantage of the falling water.

The water moves the turbine. The turbine is connected to the shaft, so it moves. The shaft is connected to the rotor, making it spin around. *Magnet* The rotor rotates; it is a large wheel of electromagnets. (Have volunteer spin while holding the magnet to imitate the rotor rotating) We need something surrounding the electromagnets to get electricity flowing.

*Copper Piece* Surrounding the wheel of magnets is a ring of copper coils, called a stator. The Stator stays stationary. (Second volunteer stand still with piece of copper while first volunteer continues to spin) As the magnets of the rotor spin past the copper coils of the stator they push and pull the electrons in the atoms of the copper causing them to hop from atom to atom. *Image of moving electrons* Moving electrons=electric current flowing. Now that we have the electricity we need to move it from our powerhouse to your house. (May omit transformers for younger age groups)

Before the power leaves the dam the transformers give it a ‘shove’ out of the powerhouse so it can flow effectively down the wires to get to your house. How do we give the power a shove? *Bookend with Copper Wire Coils* We change the voltage of the electricity by moving it through a step-up transformer. Inside a transformer there are more copper coils on one side than the other and this difference changes the voltage as it passes through the transformer. Doing this will allow the electricity to flow more effectively down the power line so there is less loss of electricity due to heat.
Electricity has to travel down wires to get where it needs to go. These wires are usually made out of aluminum because the atoms let go of the electrons easily like copper atoms do. Aluminum is much lighter than copper and can handle being strung from tower to tower. However, the high voltage from these power lines would cause everything in your house to blow up. The voltage needs to change again.

How can we decrease the voltage? There are several step-down transformers between the high-voltage lines and our homes so when it reaches our homes it is at a level that is standard for home use.

So now that we have electricity in our house, how do we control it? And what are some of the ways that you use electricity? How many of you turn off your electronics and lights when you are through with them? As more people move in to our region, the demand for electricity will increase. How are we going to continue to provide electricity to a growing population? Do you think we can build more dams? We have to conserve electricity so we have enough electricity to go around and meet the demands of a growing region. How do you conserve electricity? Turning off items is not the only way to save energy. Purchasing and using energy efficient appliances, better insulation of homes, and energy saver doors and windows are ways to start conserving energy.

There are four positive aspects to producing electricity with falling water: 1. It’s clean; 2. It’s cheaper than other ways because we don’t pay for the water that’s making the turbine move; 3. It’s efficient; generators can be started in minutes and electricity added to the grid quickly; 4. It’s reusable and renewable. Reusable because the water is used over and over again down the river as it flows from dam to dam. Renewable because of the water cycle. Hydropower does not consume the water, it uses the force of it falling and lets it go.

Using falling water to make electricity is an amazing process! Remember that every time you use electricity, someone is operating a generator somewhere for you to enjoy that electricity and make your life easier. Remember to not take that for granted and conserve energy where and how you can.

Props: Hydropower props representing river (bottle of water), dam (piece of concrete), turbine (pin wheel), rotor (toy horseshoe magnet), stator (piece of stator coil/chunk of copper), 2 transformers, step-up and step-down (model/metal bookend w/copper wire wound around each side; once side 2x as many coils), poster illustrating electrons moving between atoms, power line (piece of power line), light switch and light bulb. Dam / generator cross section poster.

Conclusion
Understanding how electricity is produced and where it comes from can guide consumers’ choices about their use of it. The prop-bag template brings movement and interaction to a program that could be a dull lecture.

References
Foundation for Water and Energy Education; www.fwee.org
Interpreting Climate Change in Interesting Times: how to help our visitor understand and care

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Abstract
Climate change impacts us all whether politicians wish to address it or not. We can help our visitors understand climate change through ways which help them see hope and purpose. Learn powerful metaphors, bridge and pivot techniques, and solution-based techniques, all based on behavioral research, to bring maximum impact and to make climate change real for our visitors.

Introduction
With the current political environment and our human tendency to not worry about future problems, it is more important than ever to keep fresh in our visitors’ minds the hopeful story of how we can reduce our impacts on the Earth’s climate.

Ways to Help our Visitors Understand and Care
A record number of Americans believe that climate change is real (“Poll,” 2017). Yet, given the current political climate of fake news and alternative facts, encouraging our visitors to understand their impacts on the climate and to look for collective solutions can be a challenge. Behavioral science tells us that any climate change discussion should include certain components if we want to promote a thoughtful and proactive local population. These components include:

• using values that set up a positive hook to solutions early and often,
• turning the message into a story format of protagonists and challenges,
• using explanatory chains and metaphors to pull your audience along,
• finding connections to your audience’s lives through universal concepts,
• using tangibles and intangibles to make your story real,
• guiding past disruptive thought patterns which derail your message,
• using social math when numbers are important,
• highlighting local climate change solutions to local challenges.

Conclusion
The story of climate change should be told from an encouraging platform of hope and positive outcomes and which relate to scientific facts and local solutions. This is possible with the help of recent behavioral research in how our visitors understand and process the issues of climate change.

References
Interpretive Planning and Budgeting at Air Force Field Museums

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Abstract
The United States Air Force is an enormous organization with an astronomical budget—but almost no resources for its field museums. By adopting interpretive principles and processes, the Air Force Global Strike Command History & Museums Program is revolutionizing how the Air Force engages with its own history. We have used interpretive planning to define and market our programs and their impact on the mission of the organization. And interpretive planning has enabled us to predict future costs, and gain access to a share of the budget, vastly increasing our future effectiveness.

Introduction
What's it like to bring interpretation to a large museum program that never had it before? It's revolutionary.

Air Force Global Strike Command's three field museums and three heritage centers have seven paid employees between them, and barely $100,000 in annual budget combined. Decades of insufficient staff, funding, and oversight led to program failure across the board. Excellent individuals lacked the support, resources, and vision to succeed. By adopting interpretive principles and processes, we have started to improve our programming, increase our value to the Air Force, and to make our contributions visible and understandable to the decision-makers.

Revolution through Interpretive Planning
The United States Air Force has an instinctive understanding that its heritage, and its material culture, are important. But it's not exactly sure how these things are important, or how to use them to best effect. A network of field museums is intended to convey that heritage, but local bases have generally been left to their own devices to operate and support their museums. Ironically, despite their focus on advanced technology, most Air Force museums entered the 21st century with programs firmly in the 19th century style. Well-meaning amateurs, or passionate subject-matter experts lacked the know-how and tools to modernize.

Starting in 2015, the History & Museums Program of Air Force Global Strike Command began to redefine the foundational assumptions of the museum program in their subdivision of the Air Force. By seriously looking at audiences, messages, and methods, we were able to align the mission of the museums with the mission of the command. Interpretation, which is explicitly about mission-based communication, has been central to every step of the process. We wavered for a while on whether we would pursue formal interpretive planning, but decided to try it out. It's a good thing we did.

First, basic interpretive planning, facilitated by Certified Interpretive Planners, is helping us define the missions and goals of each museum. Programs that were once entirely topical in nature are embracing themes. Museums that used to focus on airplanes are now focusing on teams, and communities. Museum planning, on the rare occasion that it happened at all, was being done by one overworked museum director in isolation. Now, interpretive planning workshops are involving stakeholders, including military leaders, who are learning what our museums can do for them.

Second, interpretive exhibit planning allows us to show that there is the direct link between museum programming and the mission of the Air Force. By defining the goals and objectives for exhibit projects before moving on to scripts and exhibits, we're able to show that our museums are solving problems for commanders, and that they're making better Airmen and better relationships with our host communities. Again, Certified Interpretive Planners have been essential to this success.

Third, exhibit planning broke a budgeting logjam that was making it impossible to fund exhibit development. Simply put, museums couldn't contract for exhibit development and fabrication, because they had no idea what they needed the contract to produce, or what it might cost. It was an enormous leap of faith to spend so much money on planning and design, but it has already paid dividends. Exhibit plans have enabled us to estimate our medium-term budget needs for exhibit development. Even more important, they have equipped us to market our programs to senior leaders, with remarkable success.

Conclusion
Nothing in this presentation is new and surprising to an audience of interpretive professionals. It's all basic interpretive management. But we have introduced it into a new environment: Air Force-operated museums. In the process, we have demonstrated the value of interpretation. We have organized failing programs, and aligned them with the larger mission of the organization. We have defined our needs in a language the Defense contracting system can understand. And we have obtained marketing tools that have successfully captured the imagination of our senior leaders.

References
Poetry and Educational Programming in the Museum: Accessing participant’s lived experiences

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Abstract
This InterpTalk discusses using poetry as interpretation technique and education programming tool to allow visitors to come into contact with and experience difficult narratives. Using poetry as a means for visitors to connect their lived experiences to the museum, this talk will explore how poetry is not out of place in the museum but actually a means by which visitors can come into relationship with difficult narratives. Participants will be provided with the opportunity to try a poetry exercise, and leave with some poetic tools to use in their own workplaces.

The poet Hafiz wrote, “The words you speak become the house you live in.” As if what we place into the world through our words become a dwelling place, a home, but also a place of action. Through our words we can put change out into the world. For me poetry has always been something that has led me into the sacred. No matter how graceless or graceful my journey into it, I think there is a distinct character to poetry in that it refuses to transcend the mire of our lives, insisting instead on naming the unwanted anchors that keep us stuck, while still being a passage through the mud and the muck into a new place, awareness. It is this journey, I believe, that makes poetry a useful interpretation tool within museums.

As Jean Vanier writes, “Community is a place of belonging, a place where people are earthed and find their identity,” (p. 13). Poetry plants us in the same soil. It unites us in its specificities and bridges us in its compassionate generalities. It is a poem that brings the small intimacies of my life into community with others, and for me, then, using poetry in a museum setting is a radical poetic and interpretive act. But, to get to this point is not easy, it requires us to make a public the personal, which I think is a challenge to all of us when we are building community through interpretation - no matter how we are doing it. This is a very real hurdle that I think poetry can be used to bound over. There is a safety in metaphor. It allows for a personal narrative to be safely shared and thus brings people together. Of course, the reciprocal of this is that it is not only the speaking of the narrative that brings people together but also the receiving. In actively listening to another’s story we are coming together in community, as well, and we are actualizing the lived experiences of museum visitors in relationship the material we are interpreting and in relationship to our own lives. Martin Buber explains this process within the framework of community, noting that coming into dialogue with another means “turning toward oneself and away from the particularity of the other person [so that] in ‘reflexion,’ the other is allowed to exist only as ‘a part’ of oneself” (Friedman, 1991, p. 11). The process of moving into community with another, I am learning, is a process of growing together. It is not an appropriation of another’s stories, but it is a coming alongside another’s stories – which should be the ultimate goal of interpretation, a making space for another’s stories to be articulated for our stories cannot exist without, first, our stories of ourselves.

Poetry – wherever and however it finds us - that tethers us to a moment, a place, a history. Writing helps us make sense of the world, but it also allows us to put into the world moments to pause with and moments to move with. Poetry gives us reason to rest and reason to stir. It brings us into community. When used interpretively, poetry can bind a visitor to a specific moment. It can be used to voice difficult narratives and, most importantly, it can be used to help the visitor locate their lived experience within the museum.

References
Re-invigorating the Wildlife Station Visitor Center at Custer State Park

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Abstract
An in-depth look at the efforts involved in remodeling the Wildlife Station Visitor Center at Custer State Park, South Dakota. The challenges of working within the confines of a repurposed structure, accommodating hundreds of visitors a day during peak season, and handling almost everything in-house. Plus a look at future plans and an opportunity for brainstorming and group input on your projects.

Introduction
Custer State Park sees over 1.5 million visitors a year and roughly 260,000 of those visited one of the four visitors centers during 2016. From December 2016 to May 2017 one of the projects the Park's Interpretive Division tackled was to remodel the interior of Wildlife Station Visitor Center. Originally constructed by the Civilian Conservation Corps, the building functioned as staff lodging until opening as a visitor center in 1987. Mostly untouched during the intervening 30 years we faced a few challenges: working within the confines of the shell of the existing structure, accommodating 400+ visitors a day at peak, and handling everything in-house. During the summer of 2017 we gathered a sample of staff, volunteer, and visitor impressions of the current state of the remodel.

We'll delve into the ins and outs of the exhibit development process; how we identified what “chapter” the Wildllife Station Visitor Center should tell in the overall Custer State Park “story”. We'll look at what worked well, what almost worked, areas we've already identified as needing improvement, and the pending projects slated for Phase II.

Please bring your own ideas, thoughts, and projects-in-progress as we'll open the floor for group collaboration as well.

References


Experience Place-Based FieldSTEM and STEAM Education Programs to Improve Relevancy and Inspire Students to Achieve

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Abstract
We will present two case studies of highly engaging education programs which encourage students to consider science, technology, engineering, arts and math career paths. Students learn that these are inspiring fields which help them find their passion. Case study one will focus on The River Mile, a network of educators, students, resource managers, and scientists collecting and sharing data collected in the Columbia River Watershed, Washington. Case study two will focus on STEAM, a hands-on summer mentorship program for low-income middle school girls in Vero Beach, Florida.

Introduction
This presentation will explore both STEAM and FieldSTEM™ programs focusing on 1) the value of location relevance and topical links that anchor engaging activities for youth and formal education partners creating lasting impressions and encouraging repeat visits. 2) Connecting with appropriate experts and mentors to make programs authentic and relevant. 3) Participating and learning about collaborative opportunities that strengthen relationships with education partners. 4) Securing multi-year funding.

Case Study One
The first case study, The River Mile Network (TRM), is a participant driven approach to investigation and understanding of the Columbia River Watershed to explore the essential question: How do relationships among components of an ecosystem affect watershed health? Educators, students, resource managers and scientists throughout the watershed document and share scientific data in a collaborative network. Schools adopt a section of the watershed as their hands on FieldSTEM™ lab for data collection and analysis to apply science, technology, engineering, and math with literacy for locally relevant, integrated, project-based learning.

The program is managed and presented by Lake Roosevelt National Recreation Area, a unit of the National Park Service, along with partners who represent natural and cultural resource professions and the education community. Pacific Education Institute (PEI) and The River Mile (TRM) provide STEM teacher training that brings environment, agriculture and natural resources into science education. PEI’s FieldSTEM™ technique integrates the new Washington State Learning Standards combining Next Generation Science Standards with Common Core English Language Arts and Math, using a local area of each school as the focus for learning.

Case Study Two
Males are more likely to pursue a degree in STEM fields, with almost 27% of male freshmen planning to major in STEM compared to only 8% of female freshmen in 2014.1 The K-12 years are critical for engaging young women in STEM fields. Girls are first exposed to STEM fields during the K-12 years and although they have similar abilities to males, they tend to lose confidence in their math and engineering abilities during this stage.2 The second case study attempts to address this gender gap by sharing the success of STEAM (Science, Technology, Engineering, Arts & Math), an innovative middle school girls’ mentorship program for low income girls from diverse backgrounds who build their skills in STEAM career fields through a repeat visitation summer program. The pilot, a five day summer camp, showed the magnitude of the need to improve STEAM skills. The second year we expanded to a ten day summer mentorship workshop. A variety of levels of mentors were utilized; college interns, high school interns, active professionals and retired professionals from the American Association of University Women (AAUW), Vero Beach, FL. The girls identified with the near peer high school and college interns.

These girls spent the summer meeting women professionals working in STEAM fields, many in leadership roles. Emphasis was placed on the girls sharing their career goals at the beginning and end of the summer. Measurable objectives were addressed through pre and post surveys. By the end of the summer 90% of the girls indicated that they were confident they could achieve in a STEAM field and affirmed that the program connected them to women professionals working in their field of interest. The girls improved their STEAM skills, especially in Science, Engineering and Math. Attendance was strong throughout the entire workshop, the girls enjoyed feeling empowered and shared “this program showed us girls can do anything.” The Environmental Learning Center will continue seeking funding to grow this program and inspire more young women to achieve in STEAM fields. We have successfully supported this program for two years through the generosity of Quail Valley Charities and the American Association of University Women.
This session will conclude with a brainstorming session to enable participants to start shaping a STEAM program for their sites to inspire students to achieve in higher-paying fields.

**Conclusion**

Environmental science education programs with career training elements are attractive in the current competitive fundraising climate and guide us to the future of interpretation. Exposing students and teachers to the reality of potential earnings, and a diversity of careers guide students to achieve.

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M Thom. *Fieldstem Careers in Washington State*. Pacific Education Institute

5 Top Tips to Create an Engaging Video From an Award Winning Director

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Video: A Powerful Interpretation Tool
As early as 1922, when the first documentary film Nanook of the North was a box office hit in the US and abroad, we discovered the power of (non fiction) film to inform and inspire audiences.

Today, with video technology becoming increasingly user-friendly and its costs taking a nose dive, it is no surprise that video content is now exploding both in cyber space – on websites, social media feeds, mobile aps – and in the real world – classrooms, board rooms, visitors’ centers, etc.

While interpretation professionals do not need to abandon the written form, in today’s multimedia universe, those who also learn the filmmaking “language” will be able to strengthen their message, broaden its reach, and deepen its emotional impact.

What Ignites Viewers?
Many first time media makers often spend long days working on their first short only to realize that viewers click away after playing it for just a few seconds. Granted, while no one can control audience behavior, there are some key, time-tested principles that can help make a video captivating and leave viewers wanting more.

Sylvie Rokab, the award winning director of LOVE THY NATURE – narrated by Liam Neeson - will dilute essential film production concepts into 5 down-to-earth tips to help interpreters create and share their messages powerfully on video – whether for social media, board rooms or visitor centers – and keep their audiences engaged.

Sylvie will explore how to:
• take an idea and morph it into a story.
• use camera and lighting techniques to make the picture come to life.
• avoid common filming pitfalls.
• plan properly - to save time and money.
• “shoot for the edit” (and avoid re-shooting).
• evoke emotional impact (without manipulating the audience).

This multimedia session will show images and clips to illustrate the principles discussed. And through interactivity, interpreters will have a chance to share what they envision creating, and ask questions to help advance their visions.

Sylvie’s life mission is to inspire adults and children to deepen their connection with nature. By sharing concepts she draws from her 20+ years of filmmaking experience, she aims to empower interpreters to create their own videos – and awaken people’s desire to discover, protect and/or restore our natural places.
Turning Everyday Materials Into Engaging Displays and Exhibits

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Abstract
As interpreters, we want to engage visitors by providing them with memorable experiences. Signage, displays, and exhibits are excellent ways to connect visitors to your site or resource. But tightening budgets are making it harder to afford these types of projects. Rather than wait until you can afford something new, use these kinds of financial challenges to create inexpensive, low-tech interactive displays from ordinary materials.

Introduction
We want people to be engaged, thoughtful, and inspired as they visit our sites. This can happen through the use of professionally designed installations. But it can also be done through displays and materials created in-house. By staying focused on what the goal is in creating an exhibit/display rather than on using the latest technology or making things look stylish, you will help visitors experience what you want and how you want.

What You Want Visitors to Remember
“Visitors remember experiences, not graphic panels.” (Taylor Studios, Inc.) In other words, what you use isn’t as important as what you are having the visitors do. The message is key; what it’s printed on doesn’t have to be the most expensive materials available. While it is important to apply graphic design principles, the materials used could be poster board, large Post-It® easel pads, or corrugated plastic sheets. If your organization has used foam core for other signage and it is no longer needed, you can repurpose the signs by peeling off the sign and attaching new paper.

Interactives don’t need to use fancy technology. They need to be simple to operate and somewhat durable (depending on how long they will need to be used.) For example, many nature centers have mystery boxes or touch-and-feel boxes which visitors reach into to guess what is inside. Wooden versions can cost over $25 apiece. An inexpensive alternative is to use paper grocery bags. Cut a flap on one side. After inserting the mystery object, fold down the top. These mystery bags store flat and work just as well as the more expensive wooden boxes.

PVC pipe can be used and reused in many ways – to make easels, as posts to attach signs to, structures to climb through, and frames for backdrops. Once the event is over, the pipes can be disassembled for easy storage. The PVC pipe frame can be covered with tarps, plastic tablecloths, or fabric.

Do you have magnetic white boards in the area where your display will be? Take advantage of the magnetic surface to create interactives that can be moved. Sorting activities, matching games, or question-and-answer activities are just a few of the ways you can use of magnets for interactive displays.

Another way to deal with the costs of new displays is to look for partners. Eagle Scouts may be able to help you by constructing display structures. Local high schools may be looking for places where they can do service projects. Colleges or technical schools may be willing to work with your organization in order to give their students hands-on experience in their particular field of study.

Conclusion
Tight budgets can restrict your ability to add new displays or interactives to your site. But a little creativity with everyday materials will let you engage your visitors with multi-sensory displays for that one-time special event or as a seasonal exhibit.

References

**Abstract**
You’ve heard a little about geocaching. And there is so much more to learn!

Experience for yourself how geocaching, an experiential outdoor adventure game, can also be an engaging and creative tool for interpretation. Reach new audiences that might never set foot in a visitor center, and use technology to tell old stories in new ways. We’ll showcase the use of geocaches and specifically GeoTours to tell interpretive stories at Mount Rainier National Park, Spokane County, and Leavenworth Fisheries Complex with the help of local partners. We’ll provide techniques, best practices, and pro tips to create your own success story.

**Introduction**
Geocaching is an experiential adventure in which players interact with the outdoors using a free mobile app or a GPS device. They find clues and containers, plus educational material, while exploring outside.

**Geocaches and GeoTours Elevate and Gamify Interactive Outdoor Play**
Whether you’re a remote national park or a busy urban area, geocaching can also be an engaging and creative tool for interpretation, a means of reaching new and younger audiences that might never set foot in a visitor center, and an opportunity to use technology to tell old stories in new ways.

Sites that have done this well number in the hundreds. In this session, we will facilitate discussion and Q&A, and offer participants a chance to try their hand at geocaching to experience its potential as an interpretive tool.

We’ll showcase the successful use of “GeoTours” at Mount Rainier National Park and Spokane County in partnership with volunteers, tourism agencies, and businesses.

We’ll also examine the geocaches at USFWS National Fish Hatcheries.

Visit Rainier Centennial GeoTour: 100 geocaches to celebrate 100 years of the National Park Service. This GeoTour excited the traveling public with game locations placed around Mount Rainier and in the surrounding gateway communities. Geocaches were released in a four-part series of 25 caches each. Small prizes were available for completing each series, plus a bonus geocoin for finding all 100.

Sustainability of Spokane GeoTour: Annual themes highlight the interesting details of Spokane's region. The first year focused on history. The second year switched to movies and film locations related to Spokane. The current theme emphasizes sustainable efforts around Spokane. Solar arrays, electric car charging stations, farms, wind energy, community gardens, tree plantings, hydro power, and more.

Geocaching can be played using a free smartphone app or using a handheld GPS device. In areas of poor or no cell phone reception, mobile devices can be used in offline mode. Official representatives of parks, land management organizations and law enforcement agencies are eligible for a free Premium Membership with Geocaching Headquarters.

Game on!

**References**
geocaching.com/geotours
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Does Touch Have a Place in Interpretation? Researching the role of Appropriate Interpersonal Touch (AIT) in interpretive programs

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Abstract
The role of interpersonal touch has been studied in communication fields, demonstrating a handshake or other form of appropriate interpersonal touch (AIT) has rendered favorable results in rapport building with an audience as well as developing audience comfort and receptivity to messaging. This study aimed to determine if the use of a handshake prior to interpretive programming would increase the positivity of perception of a visitor toward interpreters and/or the message shared by interpreters. Researchers also sought the viewpoints of professionals in the field of interpretation about the current use and perception of touch. Finally, a post-survey interview was conducted with each interpreter involved the study. Through three angles, the research demonstrated that AIT positively affects a visitor’s perception of the interpreter and the message shared. The research also provides boundaries and next steps toward researching AIT’s role in the field of interpretation.

Introduction
One area yet to be studied within the field of interpretation was the role of appropriate interpersonal touch (AIT) on the visitor’s perception of the interpreter. For the purposes of this study, AIT is defined as touch that visitors can be comfortable receiving and that interpreters can be comfortable giving. Wood (1997) shows that a handshake or shoulder pat are accepted commonly as appropriate in teacher and student relationships. Research by Suvilehto et al. (2015) has shown that even people are comfortable with strangers touching their hand. Interpersonal touch—a pat on the back or handshake—has been shown to communicate immediacy more quickly than language (Jones & Yarbrough, 1985). Developing rapport and establishing credibility are imperative for the success of an interpretive program (Stern & Powell, 2013). Physical touch may be a way to establish rapport, credibility and convey immediacy to park visitors. This study sought to measure the impact of AIT on the perceived credibility of the interpreter and the content in an interpretive program.

Does Touch Have a Place in Interpretation?
To discern the role of AIT in the field of interpretation, researchers developed and implemented a three-part study. Part one consisted of a focus group of four interpreters sharing their previous experience and understanding using AIT. Researchers conducted this study first in order to get a baseline understanding of the use of AIT in the field. The second study conducted was a field-based, mixed-methods study to discern the impact of AIT on interpretive program participants. This involved surveying over 400 participants in both control and experimental groups to determine whether they viewed the interpreter and the content differently when an interpreter introduced themselves with a handshake. Finally, as a follow-up, researchers interviewed the four interpreters who led the programs that were part of the second study to understand how they perceived the use of touch in the field as well as during the study.

Conclusion
Results from this three-part study will be summarized and discussed. In addition to learning about this research, participants will gain an understanding on the appropriateness of AIT in the field with regard to age and audience size as well as its implications for dialogic programming.

References
The Power of Credibility

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Abstract
Credibility allows us to be believed and it gives weight to what we communicate. Several factors go into supporting our credibility. Some we can control, some we cannot. By understanding these factors, we can work on the ones we can change and work to accept the ones we cannot.

Introduction
We want to be believed. When we communicate, we want people to trust us. Credibility is one way to describe our believability and/or our ability to persuade. As an interpreter, it is vitally important that the audience believe you. They must see you as a credible source. If this is not the case, the message you want to get across may not get communicated. For the purpose of this article, the focus will be on person-to-person interactions.

The Power of Credibility
This assessment of your credibility begins when they first see you. In the blink of an eye, the visitor will make a judgement about you. It will be based on several visual cues and you will be measured against what they expect (Bassett, Staton-Spicer, and Whitehead, 1979). If an interpreter looks like he/she just rolled out of bed, a lot of valuable information will be lost on the audience. Factors such as appearance, posture, and demeanor can be controlled while other factors such as race or age cannot be changed. People create a snap judgement and it will form your initial credibility. This initial credibility will affect how your message is accepted.

When you begin to speak, your credibility typically will improve or decline. If you have a commanding grasp of the subject at hand and speak confidently, then your credibility will improve. If you stumble over your words or mishandle the facts, your credibility will decline. You should be competent in your subject area. We often focus on technique but a depth of knowledge is important. Interpreters need to take time for scholarship. Surely it is more important than many of the tasks that interpreters are called upon to do such as stocking shelves or emptying donation boxes.

Conclusion
An interpreter's final credibility will be formed after they finish speaking and all the questions are answered. This will determine if the message gets through and its lasting impact. Strong credibility gives the interpreter real power (Raven and French, 1958). With this power, they can affect the visitor and the resource they represent.

References
Programs that Matter: Embracing Tough Topics

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Abstract
Tough topics can be just that...Tough! Instead of shying away from the difficult topics, learn ways to open lines of communication between visitors with different points of view. Begin with a facilitated dialogue to explore the role of audience-centered experiences (ACEs) in engaging visitors in tough conversations, and then examine applications of ACEs and other techniques through case studies from Yellowstone. Session attendees will emerge with an understanding of how to use ACEs and other techniques to engage visitors in tough conversations while interpreting their sites' more challenging stories.

Introduction
Tough topics can be just that...Tough! Instead of shying away from the difficult topics, learn ways to open lines of communication between visitors with different points of view.

Facilitated Dialogue: Exploring Audience Centered Experiences
Audience Centered Experience techniques and dialogue are being used at many sites to delve into topics that matter in today's society. Whether you want to discuss climate change, race relations, wildlife management, immigration or other sensitive topics, audience centered experiences (ACE) can help. In this section, learn from one another why ACEs are being used to help visitors engage in tough conversations and how you can put them to work at your site. Experience a facilitated dialogue first hand as we learn how to overcome obstacles, identify biases, and implement quality audience centered programming that doesn't shy away from tough topics, but instead embraces different points of view. Come prepared to converse with your peers about these emerging techniques.

Lessons From Yellowstone: Case Studies in Controversial Issue Interpretation
Case studies in interpreting wildlife management controversies in Yellowstone will challenge attendees to consider interpreters' roles in interpreting controversial issues and will introduce examples of effective strategies for exploring tough topics with various age groups. This section will explore how techniques such as discussion, journaling, role playing, and debate have been used successfully to engage visitors in difficult conversations.

Applications: Telling Difficult Stories at Your Own Site
Through discussions with your peers, apply Audience Centered Experience techniques and lessons from Yellowstone's case studies to challenging stories at your own site.

Conclusion
Session attendees will emerge with an understanding of how to use ACEs and other techniques to engage visitors in meaningful conversations about controversial topics.

Objective 1: After returning home, interpreters will be more confident in finding ways to engage visitors in meaningful conversations about controversial topics.

Objective 2: At the end of the session, front line interpreters will be able to explain several ways to engage audiences in conversations about tough topics.

Objective 3: Through case studies, attendees will develop an understanding of successful controversial issue interpretation at another site.

Objective 4: During discussions, attendees will apply ACEs and concepts from the case studies to develop new ideas for how to interpret controversial stories at their own sites.
Lifelong Learners May Be Your Perfect Audience!

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Abstract
In 2016, The Florida Aquarium formed a new relationship with several adult lifelong learner organizations. There was a need for the education team to reach out to a new audience to fill a gap in the programming already offered to school groups and children. The result turned out to have benefits that exceeded expectations, for the education department and for the adult learner audience. Teaching to adult learner groups is a mutually rewarding endeavor because it allows educators to implement programming for a different audience, and because the audience was very receptive to and enthusiastic about the Aquarium’s conservation messages.

Keywords
Adult learners, adult programs, conservation, audience types, zoos, aquariums, conversation, programs

Introduction
The Florida Aquarium is a not-for-profit company located in Tampa, Florida. The Aquarium opened in 1995 to showcase Florida’s unique and fragile ecosystems and wildlife. The Florida Aquarium has a commitment to entertain, educate, and inspire stewardship about the natural environment. One of the ways we do that is through our education programs, which are typically developed for elementary and middle school students. In 2016, we decided to expand our programming to adult “lifelong” learner groups. There were two reasons for this. School groups are typically scheduled in the mornings due to the school and bussing schedules. This left our new Carol J. & Barney Barnett Learning Center unused for the afternoons. So much of our conservation messaging is targeted to the “next” generation of children and decision makers, that it now makes sense to also be targeting the adult learners, and how those experiences related to the topics presented during the session.

One of the most rewarding aspects of our endeavor with adult learning was that it gave us the ability to reach a new audience with our conservation messages. One of the courses we offered, “Protecting & Restoring Our Blue Planet” was solely focused on the conservation and research initiatives of The Florida Aquarium. During this six-week course, we discussed pollution in Tampa Bay, coral reef restoration, shark conservation, sea turtle rehabilitation, sustainable seafood, and maintaining animal health and wellness. Each topic was accompanied with specific conservation actions that the participants could learn about. In getting to know the students, it became clear that adult learners tend to be very active in their communities. Many belong to other social groups including churches, condo associations, and hobbyist gatherings. In addition, most of our participants had children and grandchildren that they interacted with on a regular basis. So much of our conservation messaging is targeted to the “next” generation of children and decision makers, that it now makes sense to also be targeting the adult learners because of their significant sphere of influence.

Conclusion
After the first year of offering programs to lifelong learners, The Florida Aquarium is now expanding this program to include more topics. The educators and biologists have many different areas of knowledge and expertise, so it is unlikely that we will ever run out of course topics. We plan to keep adding or swapping out classes as needed in order to maintain this relationship with our adult learners.

References
Getting the Right Guides on the Bus: Behavioral Interviewing Techniques to Build an Interpretive Team

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Building dynamic, engaged, resilient, creative teams begins with who you invite onto the team in the first place. How many times have you hired someone, only to find yourself asking: who are you and what did you do with the person from the interview? How can you improve the interviewing process and hire candidates better aligned with your team goals? Behavioral interviewing is a technique that delves into past experiences to understand future outcomes using—and this is the best part—storytelling! What could be more interpretive? You get to know your candidates better by listening to them interpret a fascinating resource: themselves.

This session will explain behavioral interviewing as a technique and explore its value to hiring managers in building successful teams. Attendees will have the opportunity to practice the technique and discuss the unique challenges of finding great candidates in the interpretive field. This will be peppered with stories and observations from my years of hiring 20-25 seasonal employees each year for the San Diego Zoo guided tour team.

But what is behavioral interviewing? Is this just some new management fad or gimmick? Well, it certainly is a strong trend that’s been gaining in popularity, and for good reason. Anyone who has delved into the murky world of assessment knows that people are notoriously inaccurate in predicting their future actions. Rose-colored glasses go on, and most people answer the question with what they think the asker want to hear from them. Will you recycle more? Yes, of course. Are you committed to conservation? Absolutely. How would you handle an angry guest? Why, I’d be perfect in every way! We constantly ask people in interviews to predict what they would do. Then they go about their merry way and think no more about it . . . and that is part of why the person in the interview and the person hired sometimes seem like two different people.

Instead of vague, fantastical future predictions of what they might do, behavioral interviewing prompts candidates to talk about what they have done. Past behavior is a much better predictor of future behavior. In addition, for our field, behavioral interviewing has the added benefit of asking candidates to tell stories. Not only will you have a chance to understand your candidate more fully, you’ll get a stronger sense for their communication style and what their go to interpretive techniques tend to be.

Okay, you’re thinking, those are the benefits, but how does this actually work? Let’s take a question we just saw a moment ago: How would you handle an angry guest?

That’s a pretty standard format for an interview question. In fact, many years ago, when I interviewed to begin at the zoo, I was asked that question. Here’s what it looks like as a behavioral question: Tell me about a time you encountered an angry guest. What was the situation and how did you handle it?

Now we’re getting somewhere. Now this is about something that actually happened, and my experience is that people tend to be surprisingly honest in their answers. Sometimes they probably shouldn’t have been! In the effort to justify their actions, I have heard people share defensiveness, blaming, lies, and corporate theft. Am I hoping to hear the worst? Goodness, no, but I sure do want to know about it before I hire them. In the best answers, I hear someone who understands the importance of not taking the situation personally, who is a master of the blameless apology, and who shows a solid grasp of conflict management techniques. If I also hear a good story arc, gentle humor, strong connections, and easy rhythm, I’ve found an all star.

Candidates will often try to answer hypothetically or generally, especially if they’ve never encountered this kind of question before. Asking behavioral questions requires more from the interviewer as well as the interviewees. If you settle for the general or hypothetical answer, you’ve lost the opportunity to get as much from the interview as you can. Ask prompting follow-ups like:

1) It sounds like that happened a lot. Can you think a specific instance?
2) Tell more about . . .
3) Has that ever happened to you? Tell me about that time.

These prompts help refocus the conversation . . . and that is what can be so great about a behavioral interview: it’s a conversation. The interview is richer and more interactive, which yields more insights into who you might be hiring. After all, the interview is the beginning of your relationship with your new team member, and, done well, it opens the door to collaboration.
Race to Illumination: Discover Meaning While in Motion

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Abstract
Any site can develop an "Urban Dare" or "Amazing Race" style program that provides opportunities to expose participants to resource topics and issues using a series of physical and mental challenges. The Amazing Challenge Race at Myrtle Beach State Park has completed its fifth year with 98% of participants planning to return. Following a four step process, your site can create your own scalable, resource-relevant program. By capitalizing on the resources already available at your site, interpreters can introduce visitors to the deeper meanings at their site, introduce new visitors to their sites, and generate revenue.

Keywords
event, race, unique, revenue

Introduction
Myrtle Beach State Park (MBSP) discovered a unique way to introduce new visitors to the park while showing frequent visitors parts of the park they may have never explored. Based on the TV show "The Amazing Race," MBSP developed the "Amazing Challenge Race," which takes participants through four miles of the park to complete 20 mental and physical challenges. This event has proven highly successful with 98% of participants saying they would participate again and 10% of participants having never visited the park prior to the event.

Create Your own Race
The Amazing Challenge Race is scalable, resource relevant, and transplantable to any site. By walking through the following four step process, interpreters can develop a race that provides opportunities to expose program participants to the diverse meanings of the site.

The first step is to determine the purpose of the event, which will be multifaceted. Are you trying to bring new people to your site? Is generating revenue important? Will this event fill a gap in programs or bridge a change of season? For MBSP, the goals for this program are to generate revenue and highlight areas of the park that are rarely visited during a period of lower visitation.

The second step is to determine what you want the race participants to know or understand after attending the event that they did not previously know. This can include little known history of the site, changing behavior to meet resource management goals, or showcase a recreational opportunity that is underutilized. What do you wish visitors would do, not do, or know? Generate a list and think broadly. For MBSP, the interpretive staff want to make a big impression regarding litter on the beaches. We also want to increase the use of the interpretive trail, reinforce proper beach practices regarding sea turtles, show proper camping etiquette, and remind adults how to have fun! This list should be long because from here is where the inspiration for the challenges will come.

The third step is to evaluate your resources. How much time, money, and manpower do you have to devote to this event? MBSP is fortunate to have a large volunteer base, so we capitalize on a large amount of labor; however, the labor had to be concentrated into a short period of time. The challenges we construct have to be monitored and removed once finished. With a very limited budget, we focus on using displays, signs, and facilities already in place. We dig deeply into the boxes of random items we have kept over the years and think about the materials from other programs that could be turned into a challenge. We ensure the items we do purchase will be reusable for multiple years.

The last step for developing your own Amazing Challenge Race is to decide if this event will be an actual race or if you will reward all teams that simply finish the course within a certain period of time. Both methods have their merits. Making sure that the first team that finishes the race does not have to wait an unreasonable amount of time ensuring the racers finish within two hours of each other. A race-style event provides motivation for the racers to run from one challenge to the next and finish each challenge as quickly as they can; there is a sense of competition, although not every team strives to place. A completion-only style event allows racers to move at a slower pace; however, having a time limit can be important for staffing. Evaluating how long the course will take to complete, how many staff are needed to operate it, and how permanent the challenges are will enable you to make a well-informed decision regarding which style of event is best for your site.

When developing the individual challenges that will populate the length of your course, there are a wide variety of tasks you could set up for teams to complete. MBSP interpreters break our challenges into three categories: Nature, Recreation, and Silly. Nature challenges might be things like digging a sea turtle nest or identifying a photo of a shark. Recreation challenges might be putting a tent up and back down again, casting a fishing line, or throwing a cast net. Silly challenges might be going through an obstacle course on a playground, keeping a feather in the air using only your breath across a certain distance, or putting together puzzles.
There are three questions to consider in order to create an effective challenge. First, how will you determine if the team has successfully completed the challenge? More difficult challenges will need to have some mercy for completion. If a team is unable to meet the standard for completion, what lesser level of completion must the team achieve? While this is a competition, having a poor experience can sour the entire memory; you want the racers to have a good time! Second, how many teams can a particular challenge support? Consider the materials and number of facilitators needed to monitor to ensure completion as well as reset any needed materials. Third, must this challenge happen at a particular location? Digging a sea turtle nest must be done on the beach, but identifying a photo of a shark can happen at any location. Where can a challenge be located to minimize the amount of set up required? Be sure to test challenges on staff who are not involved with developing the event.

**Conclusion**

Creating an event to draw in new visitors and entice frequent visitors to a deeper appreciation of the resource can be very rewarding but requires brainstorming and creativity. By walking through the four questions for developing a race and the three questions for creating challenges, your site can have its own unique event. Happy racing!
Reflections of a Place: Creating a 100 Year Story of Connections

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Abstract
The Long-term Ecological Reflections Project is a century-long “study in place” at eight locations of varying habitats in and around Shaver's Creek Environmental Center through the writing, music, artwork, and other creative forms of reflection of authors and artists. The first decade of the project has linked to geocaching, audio/video recordings, a reflection garden, social media, and placed-based research to tell the story of this place through a variety of perspectives. We invite you to investigate ways your park can use place-based writings and other media to inspire on-site and digital visitors to develop meaningful connections to your resource. Share your own reflections at a pop-up reflection site here at the Spokane conference using #NAI2017 and #popupreflection.

Introduction
The Shaver's Creek Long-term Ecological Reflections Project (LTERP) is, according to conceiver Ian Marshall, a “study in place.” It seeks to record what happens at eight locations in and around Shaver's Creek Environmental Center over the course of a full century — through the lens of authors and artists from a variety of disciplines. Modeled on the LTERP at Andrews Experimental Forest in Oregon, our park’s eight specific locations have been picked for their variety of habitat and diversity of experience for the observer, and to inspire writing, music, artwork, and other creative forms of reflection. Over the 100-year life of the project, the staff of Shaver’s Creek will work to weave these reflections together to help us tell the story of our place. Each LTERP site has its own space on our website where we have begun to collect reflections from contributing authors and artists — whether they are essays, poems, paintings, photographs, songs, or videos. Some “LTERPeters” are scientists, poets, or outdoor enthusiasts, and still others study English, sociology, or environmental science, but all bring their own style to the project. It is our hope that their eclectic writings and artwork illustrate and help add to the collective understanding of these eight locations, and by extension our greater niche in central Pennsylvania.

During this workshop we will share examples of the many interpretive opportunities the first decade of this project has produced for Shaver’s Creek, including:

- Social media: Used platforms such as Facebook, Tumblr, Twitter, and Instagram to link to reflections and share imagery from the project;
- Web publishing: Experimented with using a mobile-friendly web platform, Medium.com, to share content more broadly;
- Public involvement: Developed a reflection garden at one LTERP site that offers a place for visitors to sit and... reflect;
- Geocaching: Established eight new caches at each of the reflections sites to draw in a different audience, introduce them to the project, and even encourage reflections of their own;
- Trail map: Collaborated with sister organization to incorporate LTERP sites on an area trail map to bring greater visibility to the project;
- Newsletter: Shared content from visiting “LTERPeters” through our biannual member newsletter, Shavings;
- Undergraduate involvement: Connected Penn State students learning about interpretive design to create wayside exhibits at the eight sites;
- Book deal: Worked with a Penn State professor on sabbatical to edit the first decade of reflections into an upcoming book to be published.

We also want to investigate ways your park can use place-based writings and other media to inspire visitors to develop meaningful connections to your resource. We will designate a pop-up reflection site at the conference in Spokane and encourage our fellow interpreters to create various media connected with the site. Then, using #NAI2017 and #popupreflection, anyone at the conference can share their reflections through the week.

References

The Value of Interpretation at Zoos and Aquariums

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Abstract
Zoos and aquariums serve as bridges to connect visitors/guests with wildlife and the natural world. The deep-rooted natural connection to nature often creates internal conflict within members of the public, which then translates to passionate public opinion and potentially, activism. Understanding that misinformation or lack of information may alter public perception, zoos and aquariums are well positioned to counterbalance these through engaging, informative, and fact-based messaging. Interpretive strategies can offer visitors opportunities to see the relevance and importance of animal care and conservation organizations. Interpretive programming, social media messaging, and controversy response realigns public expectations and, ideally, opinion and support.

As our society changes, so must the role of zoos, aquariums, and the people telling their stories. With greater understanding and knowledge of the benefits of natural habitats, conservation issues, and public engagement, zoos and aquariums are shifting from display-based menageries to conservation and education organizations. Over the past two decades, zoos and aquariums accredited by the Association of Zoos and Aquariums adopted the responsibilities of conservation centers, with a focus helping society develop a more sustainable relationship with the natural world (Grajal, 2005; Penning et al., 2009; Rabb & Saunders, 2005; Wheater, Karsten, & Seal, 2005; World Association of Zoos and Aquariums, 2005). Many accredited institutions practice four key components of a conservation center: adopting as many environmentally friendly operations as possible, carefully managing and caring for wildlife, inspiring conservation leadership, and building societal capacity by mentoring and training others (Rabb, 2004). It is unrealistic for zoological parks to go about business as usual and not make a considerable investment in conservation when one of every four species of mammals are considered threatened (Rabb, 2004). The belief is that, without this investment in conservation, zoological parks and aquariums will go extinct.

As with other species in nature, human society continues to evolve. The millennial generation is where this evolution is currently most apparent. As the largest generation in the country, the millennial generation represents almost one-third of the United States’ population. As of 2014, the millennial population is 92 million among a general U.S. population of 307 million (Millennial Week DC, 2014). Millennials are cause- and emotionally-driven, as indicated by reports of 20% who think it is acceptable to keep animals in captivity if the animals are not large or ‘smart’, 23% feel animals should never be kept in captivity, and 57% have no problem with animals in captivity as long as they are cared for to a high standard (AZA Trends Committee, 2014). In an age of immediate access to information combined with an increase in the controversy over animal rights, those who are unsure if animals receive a high standard of care in zoos and aquariums are influenced by emotional and, most often, incorrect messaging. It is imperative that zoos and aquariums evolve to reach the apparently ambivalent 57% with our stories or again face possible extinction. It is estimated that 50% of the millennial generation will be in the workforce by 2020 and will make decisions on how and where to spend their time in addition to what organizations, such as social or environmental, they support.

The Value of Interpretation at Zoos and Aquariums
Zoos and aquariums serve as bridges to connect their visitors with wildlife and the natural world. A deep-rooted connection with nature can create internal conflict within members of the public, which then translates to passionate opinion and, potentially, activism. Understanding that misinformation or lack of information may alter public perception, zoos and aquariums can counterbalance these through engaging, informative, and fact-based messaging. Interpretive strategies can offer visitors opportunities to see the relevance and importance of animal care and conservation organizations. Interpretive programming, social media messaging, and controversy response realigns public expectations and, ideally, opinion and support.
Interpreters are the key to telling the stories to help audiences realize the true meaning and importance of zoos and aquariums. However, as interpreters, we must challenge ourselves to evolve to ensure that the processes we use are effective. The relevant question to the interpretive profession is how do we prepare zoo and aquarium interpreters to tell the stories to visitors, who arrive with varying cultural models, experiences, and knowledge? Interpretive principles within the traditional interpretive approach are sound, but are the processes of their application to help facilitate connections between the visitor and the resource? The traditional approach starts with the interpreter developing the message thematically and developing subsequent sub-themes to support their main point. Alternately, the dialogic experience starts with the assessment of the visitors’ area of interest, real life experiences, and knowledge base, then builds from there. Is there a most appropriate application of the traditional versus dialogic approach in zoos and aquariums?

Transparency surrounding issues and assessment of cultural models, especially, is essential to creating relevancy and connecting to the appropriate value statements of our guests through dialogue (AZA Trends Committee, 2014). We must equip interpreters with the necessary tools to achieve success in establishing and maintaining the relevancy of zoos and aquariums in modern society. If we equip interpreters properly, they have a much better opportunity to help our cause-driven generation realize the importance of zoos and aquariums and become our greatest advocates.

As previously stated, zoos and aquariums are destinations which offer visitors opportunities to connect or reconnect with the natural world, explore conservation issues and successes, and help make a difference. Communication among and between zoos and aquariums provides these organizations with support and fresh interpretive ideas to address controversy and misguided public opinion.

References


Diversity, equity and inclusion in park settings: Narratives, counter-narratives and the importance of moving beyond demographics

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Abstract
The National Park Service (NPS) has known for decades that its visitors and staff fail to represent the full range of the diversity of Americans. While the NPS has begun to address diversity, equity, inclusion (DEI) and relevance, progress is painfully slow. Previous work led to the realization that structural racism* is the reason why movement in this regard is lagging. Lack of equity and inclusion in the NPS (and by extension other public lands, parks and environmental organizations) not only puts the future of public lands at risk due to changing demographics, but may also be viewed as environmental injustice. Until recently, the NPS has had limited success in engendering true collaboration with communities of color. For this Master's thesis, using qualitative research, I conducted in-depth, unstructured interviews using an interview guide or narrative story-telling with forty participants from the NPS, partner agencies, and people from communities of color, using Participatory Action Research (PAR) methodology, guided by Critical Race Theory (CRT). Participants offered feedback about every aspect of the study at all stages of research and writing. The results revealed the critical importance of genuine collaboration and partnerships with communities of color, the need for fundamental changes in hiring practices and diversity ‘training,’ the significance of and need for structured role modeling and mentorships, among several others, along with guidance for ways to overcome multiple barriers. The recommendations and stories revealed by this research will provide the NPS with additional innovative ways to develop and implement policies and programs that meet the needs of an increasingly diverse population.

Introduction
Only a few decades ago, people of color in the United States required a guide (the ‘Green book,’ by Victor Hugo Green) in order to travel the country with some modicum of safety. The ‘Green book’ was a guide to restaurants, hotels and parks where they could be served without fear of violence and hostility. Several decades have passed, and while much has improved, Americans still struggle with inequity, routine acts of violence against people of color, and structural racism in our society, and as a result, also in our park systems. These inherent and implicit inequities create barriers to access to many outdoor spaces. The NPS and other park systems are at a critical crossroads in terms of DEI. Past failures have led to increased awareness and attempts to right old wrongs. Ultimately, though, parks systems must make DEI a priority, and they must gather input regarding how to adequately achieve true DEI from the very communities which have been marginalized.

Process and Participants
In the process of conducting the research and literature review, my initial research question was more or less answered: “Why have the efforts made by the NPS to increase the diversity of its visitors not yielded significant changes over the last two decades?” I found that structural racism lies at the heart of the problem. Lack of effective communication and collaboration with communities of color at the most basic levels complicated and deepened the situation. Merely initiating new programs and policies is not sufficient. Real and lasting change requires a multi-pronged, multi-level approach. This understanding led to the following research questions: What multi-level approaches do people of color and national park staff or partners recommend to successfully increase DEI in the NPS, and what specific changes do they think need to occur in order for structural racism to be fully addressed?

In order to ‘practice what I preached,’ I used Participatory Action Research as my methodology, asking participants to be involved in the research process from start to finish. Participants helped guide the research direction, offered their time and narrative story-telling in interviews, as well as their advice and guidance. It is clear from the results that the findings are relevant not only for the NPS, but for all park systems, and for environmental organizations on the whole.

Conclusion
This thesis captured testimony of historical challenges the NPS has faced in its quest to fulfill its mission. Finding answers to these questions revealed a citizenry demanding the NPS ‘walk its talk.’ It explored why national parks are often viewed by people of color as ‘white space,’ and the history of violence and outright racism in the outdoors that are a large part of what led to that sentiment, still prevalent today. It also revealed that another aspect of structural racism, implicit bias, insidious and often invisible, has been a primary barrier to NPS success in its attempts to become more diverse, equitable and inclusive. Even so, the cornerstone of the thesis was the stories, personal accounts of being on the receiving end of racism, and stories of the lived experiences of people of color in the outdoors.

The NPS can increase its relevancy by taking stock of and scaling up the programs it already has, creating benchmarks to strive for, while still allowing individual units to work with their local communities in a way that makes the most sense locally. At least some funding for outreach and partnerships ought to come from base funding, rather than relying on inconsistent grants. Moreover, collaborations with communities of color must be approached with the intention to listen to what communities want and need, and then offer what the NPS can do to assist. A primary and constant message from participants and from the academic literature is that true and successful collaboration (and relevancy) means asking communities what they need, and allowing them to take the lead. Hiring practices will certainly need to be reviewed and adjusted in order to become equitable. Outreach to underrepresented youth

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* 'Structural racism' refers to the systemic and institutional ways in which racism operates in society, often invisible, and which may be institutionalized in policies, laws, and social norms.
and families must take a holistic approach, engaging and training youth leaders in such a way that their leadership skills incorporate concepts of community and environment as deeply and inextricably connected, vital aspects of future conservation. Lastly, outreach to non-visitors should incorporate more connection to communities of color in their space, and would do well to include a more creative array of tools and strategies.

References


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Binge-Watching Bears: Webcams and Wildlife Stewardship

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Abstract
Webcams provide conservation organizations with powerful tools to increase public awareness and appreciation of wildlife. This presentation discusses survey results of webcam (bearcam) viewers in Katmai National Park, Alaska and the interpretive methods used to reach online audiences. When combined with effective interpretation, webcams increase public awareness of wildlife, extend conservation messages to a broader audience, and expand messaging to pre and post on-site visitors.

Webcams Inspire Stewardship
Webcams at Brooks River in Katmai National Park annually reach tens of millions of people worldwide. With specific examples from Katmai this presentation discusses interpretive methods used to reach online audiences and the research demonstrating the cam’s impact.

Interpreters at Katmai blend traditional and non-traditional interpretive methods to engage webcam viewers. Live online programs, blog posts, e-books, and real-time text chats facilitate opportunities for the audience to connect with the river’s brown bears and salmon. Survey results indicate the bearcams increased viewer interest in Katmai and wildlife conservation, and viewers’ interest in national parks and wildlife conservation is on par with on-site visitors.

With effective interpretation, webcams consistently and positively engage viewers, increase public awareness and stewardship of wildlife, expand messaging to pre and post on-site visitors, and extend interpretive messages to audiences worldwide. To build and maintain stewards, traditional interpretive programming is no longer adequate in the age of internet and social media. Webcams have the potential to engage audiences like no other interpretive tool.
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The Kids Healthy Outdoor Challenge (KHOC) program is highly successful in getting 3rd graders from low income public schools into the parks. We hope to provide inspiration and a model for the program to grow nationally.

In five years, the KHOC program has grown from 30 teachers and their classes in the first year to 150 teachers/classrooms this year and last year. The teachers are provided a free bus (grant funded) to take their students on a field trip to a Regional Park. At an orientation led by EBRPD naturalists, teachers receive a workbook for each student and a teacher’s guide. The orientation is required to be eligible for the free bus. The student workbook is aligned with 3rd grade curriculum and Common Core standards. The lessons are based on the CA Children’s Outdoor Bill of Rights (see link below).

Teachers are encouraged to visit local parks and conduct their own programs. They have the option of using our lending kits which are filled with park-specific activities plus all of the materials necessary (binoculars, dip nets, etc.) to lead their own program. They may also apply for one of the interpretive programs provided by EBRPD naturalists. This option is preferred by most teachers.

KHOC has been successful in increasing teacher comfort and skill teaching outdoors. It gets children outside and active, promotes health, well-being and builds life-long park users (both teachers and students).

References

CA Children’s Outdoor Bill of Rights: http://calroundtable.org/Copy_of_cobor.htm

EBRPD KHOC Webpage: http://www.ebparks.org/Page1428.aspx

Including teacher resources, self-guided activities, the KHOC student workbook and year end reports with outcomes and recommendations.

http://richardlouv.com/ (author of Last Child in the Woods; Nature Deficit Disorder)

http://www.childrenandnature.org/learn/tools-resources/ (infographics on the benefits to students of connecting with nature)
Lessons on Truth and Reconciliation in Interpretation

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Abstract
Understanding the interests and frustrations—the truths—held by the communities with whom we work can be challenging. What is truth, and whose truth are we talking about? Explore how interpretive planning can be part of a healing process.

Keywords
Equity, healing, truth, community engagement, interpretive planning, lost narratives, inclusive storytelling

Introduction
What is truth and whose truth are we talking about? Weaving truths into interpretive planning processes and community engagement can help heal past trauma and transform community efforts into equitable collaborations and inclusive interpretation.

Lessons on Truth and Reconciliation in Interpretation
The Truth and Reconciliation Commission in South Africa developed four notions of truth as part of a societal healing process: factual, personal, social, and healing truths. We present a case study from our work to show how understanding the different truths can be a tool for interpreters to reach underrepresented communities, and an effective means for resolving divisions in communities and building a resilient future together. We will present the truths and ask participants to consider them through the lens of their own site. Our case study will describe how the truths could be used at Thomas Jefferson's plantation retreat. The case study process of planning the interpretation included engaging descendants of those who suffered oppression and slavery, a process that can strengthen the community and offer some degree of reconciliation. The session will include group discussions about challenges and benefits of considering the four truths as a lens for interpretation and the interpretive planning process.

Conclusion
The case study and participants own sites will serve as examples of the value of the interpretive planning process when done with everyone's truths in mind. We encourage participants to think about how our shared experiences can be applied to their own situations.
Dispersed Fishing Use Monitoring Using GPS: Proof of Concept

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Abstract
Crowd-source visitor use monitoring using GPS will be explained and demonstrated. Includes hands-on, video, poster, and oral presentations of experiences and knowledge from a new fishing-activity sampling technique tested along Fire Island National Seashore beaches. Interpreters and other staff collected data using handheld GPS devices that will be available for testing. Sampling was unstructured and dependent on people's regular work assignments. Data processing examples using a spreadsheet will be demonstrated. The method proved successful at accumulating fishing activity data and to simultaneously gather rare birds and plants, plus seal and fox sightings.

Keywords
Visitor-use, GPS, fishing

Introduction
Description of a project demonstrating a new fishing-activity sampling technique along Fire Island National Seashore beaches. Although the proof of concept was based on beach fishing other visitor activities and natural resources can also be recorded simultaneously. The focus of the workshop is to introduce the GPS-search sampling and data downloading to people who may want to crowd-source visitor use and other monitoring using GPS.

Dispersed Fishing Use Monitoring Using GPS: Proof of Concept
For the pilot project interpreters and other staff collected location-and-time when fishing was observed using handheld touchscreen GPS devices. Sampling times and locations were unstructured and dependent on people's regular work assignments; repeated sampling varied by location. Most waypoints were logged from early May to August 7, from 7 am to 6 pm. Combined the searches summed to 1794 kilometers, 228 hours, 209 one-directional search-tracks, and 532 fishing activity waypoints. Some areas, times of day, and many months were not sampled during this proof of concept.

Data analysis indicated visitor use fishing activity was low to non-existent at the vast majority of times-and-locations sampled.

Four locations were exceptions with many more fishing activity observations. Fishing activity increased from May through August. Adequate numbers of observations to compare results between areas and times that were sampled, and to statistically estimate confidence intervals for fishing activity observation rates. Comparison between locations, and estimate confidence intervals, can be used to plan future studies and estimate resource impacts. The minimum number of samples needed in future studies was modeled for the most frequently fished locations.

The methods proved successful at accumulating fishing activity data; some staff used the GPS to simultaneously gather and document sightings of rare birds and plants, plus seal and fox. The data on beach use by visitors and living resources can be easily compared to determine if, when, and where visitors and living resources overlap in time or space. The GPS waypoint records from different staff working at different times are easily combined to create a more holistic and objective version of what occurs in the park.

Conclusion
The unstructured sampling provided adequate numbers of observations to compare results between areas and times, and to statistically estimate confidence intervals. Park staff can use the approach to gather data on visitors and resources simultaneously and easily combine information from staff working different days and shifts.

References


Developing Inclusive Programs and Diverse Partnerships: ASL Wilderness Crews

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Keywords
American Sign Language (ASL), Allies for Inclusion, Facilitated Dialogue, Leave No Trace (LNT), Diversity, Audience Centered Experience (ACE), Wilderness, Stewardship, Partnership, Collaboration

Abstract
Interpreters, educators and mentors, we invite you to participate in a thought provoking presentation. Allies for Inclusion harnesses the power of dialogue and education to drive cultural change, so we can all embrace and respect the full diversity of our nation. These principals of inclusion are essential to the National Park Service mission of protection and preservation. It has always been our goal to empower the next generation to continue the conversation about public land stewardship, and to take that discussion back to their communities.

Introduction
In order to engage an entire nation we must collaborate with each other, be inclusive and our themes should be relevant. As NAI leaders, we should understand communication trends and promote audience centered experiences. If we can empower our audiences, they will be drawn to these amazing places - our National Parks.

American Sign Language Wilderness Crews
Our Network of Deaf and Hard of Hearing advocates designed a program that used Wilderness to inspire young American Sign Language (ASL) stewards. This ASL team developed an awareness of Wilderness and Leave No Trace ethic using outdoor education principals. We also provided job skills and experiences that inspired a workforce minority. These small diverse programs can build into a comprehensive network of parks and partners. We will demonstrate how using this model allows your inclusive programs to grow with limited resources.

Tools
On line poll –Text to screen exercise
Send the text message ASL to the phone number 22333 to join our group.
You will receive a confirmation return text saying you’ve joined NAI Inclusion’s group.
Once you’ve joined the group, you can then answer polls through text response.

Conclusion
Our goal is to include youth with different Abilities into our workforce and interpretive programs. This pilot program is an example that can be used to mentor Allies for Inclusion of any group with supporting partners.
Interpreters, educators and youth mentors have a shared responsibility to provide equitable experiences; these opportunities can lead to personal success and positive connections for a lifetime.

References
Northwest Youth Corps - www.nwyoungcorps.org
CorpsThat - www.corpsthat.org
Olympic Volunteer and Youth - www.nps.gov/olym/getinvolved/volunteer.htm
Sites of Conscience - http://www.sitesofconscience.org

American Sign Language Resources:

*Learn ASL:*
- Follow @signedwithheart (on Instagram or her YouTube channel here: https://www.youtube.com/channel/UCZrcp5LyFbqpf1hCKakTKg)
- http://theaslapp.com/ (download the app!)
- www.lifeprint.com

*Deaf Organizations:*
- National Association of the Deaf’s website https://www.nad.org/
- National Deaf Center https://www.nationaldeafcenter.org/
- National Technical Institute for the Deaf’s National Center for Employment has great resources for working with Deaf people http://www.ntid.rit.edu/nce/employers