

Major Study Asks, What Makes Environmental Education Effective?

By Asa Duffee | Marketing & Communications Coordinator ANCA — Asheville, North Carolina

Any one who works in environmental education isn't just maintaining a job and producing an income; they're working to impact their audiences and inspire change in the world. And while many people, such as the eminent Freeman Tilden, have anecdotally defined what makes environmental education effective, we still have to ask: can we actually *quantify* effective environmental education? It's a challenge, since each program has so many variables and it takes a considerable effort to control for such variables, especially when comparing different regions and different people.

"Marc and I, we've spent probably the last fifteen years wrestling with this question ... and learning how best to design and implement a study of this complexity," said Dr. Robert Powell from Clemson University — he's referring to Dr. Marc Stern from Virginia Tech, with whom Powell works in research on EE. "There's a reason why no one's tackled this yet, it's because it is such a big thing and you need a lot of resources and a lot of expertise to pull it off."



Dr. Marc Stern at his and Dr. Robert Powell's presentation of their research at the 2019 ANCA Summit on August 21.

(continued on page 5)

ANCA Headquarters:

mail • P.O. Box 464 Logan, Utah 84323

- email info@natctr.org
- phone 435-787-8209



Founded in 1989, the Association of Nature Center Administrators is a private non-profit organization dedicated to promoting and supporting best leadership and management practices for nature and environmental learning centers.

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The ANCA Compass:

Director's Notes

By Jen Levy | Executive Director ANCA — Logan, Utah

It has been two months since close to 200 ANCA members gathered in Ohio for ANCA Summit XXV, *The Evolve Summit*, at the Cincinnati Nature Center, and I am still hearing from attendees about how the workshops & sessions, networking, and the opportunity to tour different facilities and programs had benefited them.

The ANCA staff and board work hard on this event, but without a doubt it is the work and dedication of the host site that makes for a successful Summit. I am extremely grateful to the staff and



volunteers at the Cincinnati Nature Center who, throughout the planning, hosting, and follow-up, have demonstrated a wealth of knowledge, professionalism, kindness, and creativity. Plus, they were a lot of fun to work with! They came together as a team, organized an amazing event, and made a significant contribution to our profession — thank you CNC!

For thirty years, ANCA has worked to promote and support best leadership and management practices for our members. In an effort to make our impact deeper and more just, ANCA identified diversity, equity and inclusion (DEI) as an overarching goal in our most recent strategic planning process. Specifically, our goal is to maintain Best Practices that promote diversity, equity and inclusion within our membership and the profession. It further identified objectives to achieve the above goal:

- To Educate ourselves (the Board) about the issues and priorities around DEI
- To Develop a plan for implementing DEI Best Practices for ANCA and our members
- To Create a diverse, equitable and inclusive ANCA membership

To date, we added a Diversity, Equity, and Inclusion section on our Resources webpage found <u>here</u>. In addition, we have included programming at the Summit specific to DEI, most notably was a half-day workshop on Unconscious Bias with <u>Compass Consulting Services</u> and our 2019 Summit Keynote, Nina Simon and the work she is doing through <u>OF/BY/FOR ALL</u>.

To help champion our effort, a DEI Task Force was formed, led by ANCA Board Members Glenna Holstein and Pam Musk, and the group recommended a DEI audit with the support of a consultant. Eight consultants responded to our request for proposals and we are in the process of reviewing the proposals and raising the funds needed to develop specific strategies that will support the



Ken Voorhis speaks upon receiving the 2019 ANCA Nature Center Leadership Award at the ANCA Summit.

strategic plan and thus provide leadership for our members. Further, at the Summit in August, the ANCA Board met with members at several round table discussions and asked for input on what members are currently doing at their organizations around DEI and how ANCA can support these efforts. The DEI Task Force hopes to process and respond to the feedback with concrete action in the course of the coming year.

In addition to our progress toward our DEI objectives, the ANCA Board prioritized the need to explore and define our voice toward relevant advocacy and civil engagement. ANCA must be prepared to address relevant public policy issues in a timely and effective manner and support our membership in the same. Board President John DeFillipo is championing this effort and assembled an Advocacy Committee that drafted a Civic Engagement and Advocacy Policy. A first draft of the policy was reviewed by the board at our August meeting and is back with the committee for revisions. In addition, the ANCA Board also asked members

questions specific to their advocacy efforts and how ANCA can help at the Summit round table discussions.

The feedback and interaction with members who attended the Summit was critical in our work toward our strategic initiatives. Also important was the money we raised from participants through our fundraising efforts. I am incredibly grateful and humbled by the show of support for ANCA. Thank you to The Merrill G. & Emita E. Hastings Foundation who challenged Summit attendees to match their \$2,000 donation to the 2019 Nature Nerd Campaign. The challenge was successful and a total of \$4,160 was raised for the ANCA Operational Reserve. Summit attendees also bid with enthusiasm during our silent and live auctions, raising more than \$24,000 for our operations. Thank you all for your support.

If you have any questions about our work or you want to get more involved with our current efforts, please contact the ANCA office. I hope you have a fabulous fall!



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The ANCA Compass:

Nature Centers and Active Shooter Protocols

Amber Parker | Executive Director Ijams Nature Center — Knoxville, Tennessee Vice President of Professional Services, ANCA Board of Directors

Many of us would never have thought we would see the words "nature centers" in the same sentence as "active shooter," but today we must consider such phrases together.

As public spaces with strong ties to their communities, nature centers are considered soft targets. We are often a distance from law enforcement and offer events that attract large crowds of people. As leaders of such organizations, it is incumbent upon us to make sure we include protocols for active shooter incidents in that same protocol manual we keep for severe weather events, fire, lost children, and all the other possibilities we never want to think may happen.

Do you have an active shooter protocol already in place?

If so, you have done a very brave thing by facing a troubling issue. If not, it's a great time to start. Most nature centers can contact their local law enforcement agency to ask for assistance in beginning the process. Your sheriff's office or police department will likely be willing to visit your site to evaluate it and give you great advice regarding how to respond if an incident happens. Your fellow nature center directors are also wonderful resources for advice, sample protocols,

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and a sympathetic ear as you make hard decisions regarding security.

Please take the time necessary to develop protocols with your staff and board, including time to run scenarios with staff and volunteers. It's not enjoyable, but you will feel better in the long run, knowing that you have planned for the security of all who are in your charge.

Editor's note: use the Member Portal on the <u>ANCA</u> <u>website</u> to access sample protocols for active shooter situations. If you have comments or questions on this issue, see the discussion "Active Shooter Response Plan" in the <u>ANCA Google Group</u>.



Powell and Stern have been leading such a study that may have major implications for environmental educators and nature centers. Last year they developed a team of eight researchers to observe 330 programs at 90 different organizations throughout the US, specifically looking at programs for children between 5th and 8th grade. The researchers took into account over 50 different attributes of the presenter, program, and environment, and used a survey to evaluate the children and teachers.

Using those data, Powell and Stern compared the attributes to 12 possible outcomes, including behavior change, enjoyment, learning, and environmental attitudes — in other words, specific effects that environmental education often aims to impact. While they continue to analyze the data, Powell and Stern have preliminary findings that they recently presented at the ANCA 2019 Summit at the <u>Cincinnati Nature Center</u>.

Based on those preliminary findings, more than 20 characteristics were linked with student outcomes. The strongest relationships were found in group size, novelty, natural settings, program transitions and conclusions, and the incorporation of advocacy. "There's some nuance to all these things of course," added Powell, so you'll have to wait until they publish their findings to see how you might be able to use this research.

Tori Kleinbort, a fifth-year PhD student at Clemson University who was one of the researchers in this study, sees big implications. "One of the things that I think the study will shed light on is really understanding what you're trying to achieve on the forefront," she said, adding that both upper-



A young child meets salamanders as part of a program at the Cincinnati Nature Center.

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level managers and practitioners in the field can learn from this research. "I think it's really important that those people also have a really strong understanding of which outcomes are attempted to be achieved and what outcomes there are in this type of work."

Connie O'Connor, Director of Education at the Cincinnati Nature Center, also thinks that different types of staff can use these results. "Now we have all this evidence that says that the staff really matter," she said, noting that many organizations rely on volunteers or temporary staff to do programs for large groups. "Knowing that type of thing really speaks to the need to put more money into staff training and staff retention, because it makes a difference when you have the right people in the job. And I think that that's a lot of impact on our profession."

Having been a site for the research, the Cincinnati Nature Center is prepared for the published findings of this study, as well as other academic research in environmental education.

"We've put together a task force of about eight people," O'Connor said. "We're trying to ... figure out how to get this research digestible for practitioners in a way that's really going to help them make decisions about how they're

designing programs, what they're measuring, and what they hope to accomplish."

Given the larger context of the global environmental crisis that includes climate change and loss of biodiversity, both Kleinbort and O'Connor mentioned that it's more important than ever that environmental educators are able to communicate effectively and inspire change. Kleinbort specifically acknowledged the recent climate strikes, saying "As our society becomes ever more globalized, we're able to share more information and obtain enough data to understand the potential impact we have on our climate and our world. So I think this is a really interesting time simply because of that, certainly to be in the environmental field, and then I think the research component adds an extra layer to that."

O'Connor also sees this study as a larger trend of research in environmental education, noting that more academic studies can guide organizations to better fulfill their missions. "I'm just really grateful we are in a time when research is so openly shared among different academics for the sake of practitioners," she said. "I feel like there's some exciting changes in EE ahead of us that's really going to help us see with clarity what we need to do and where we need to go. It's an exciting time."

Powell and Stern's study isn't over yet. While "Phase 1" is being analyzed, the two academics have plans to further the research. The first part of the study controlled for influences of grade level, race, and socioeconomic status, whereas "Phase 2 is focused on looking at the differences across different audiences," Powell said. "Looking at racial diversity in particular, but also that urban, rural, suburban divide." They will conduct this research through a \$1.94 million grant from the National Science Foundation.

The preliminary results of Phase 1 of this study will be published within a year. After that, keep an eye out for more reports on this research as it develops, as it may have significant implications for how your organization operates its programs.



From The Field:

Making Communities Healthy: Parks Unite with Medical Allies

By Asa Duffee | Marketing & Communications Coordinator ANCA — Asheville, North Carolina

The health benefits of spending time in nature are myriad: not only does it improve your emotional wellbeing, but it also reduces your blood pressure and supports your immune system (in addition to other advantages). It makes sense, then, that nature enthusiasts — and if you're reading the ANCA newsletter, you're probably one of these — would have a natural alliance with medical professionals and institutions. Yet such alliances don't appear out of thin air, so how do they develop in the real world?

Jamie Johannsen, Marketing and Community Relations Manager for the <u>Forest Preserves of Winnebago County</u> in Illinois, has been working on such a question for quite some time. Like many nature education organizations, the Forest Preserves have an annual program that encourages their community to spend time outside to reap the health benefits of nature. This program, called Get Outside Get Healthy, includes a passport booklet and a diverse set of activities, such as guided hikes, yoga, and archaeology. If the booklet is completed, participants are eligible for a prize.

Parts of Get Outside Get Healthy have involved healthcare professionals, but that involvement didn't necessarily have institutional support. "Individuals here and there were interested and would participate in an event occasionally but we didn't have an ongoing program or a formal partnership until this year," Johannsen said.

While that organizational relationship was lacking previously, the Forest Preserves' efforts did not go unnoticed. SwedishAmerican, a local healthcare system, caught wind



Visitors attend "Walk with Swedes" at Severson Dells Nature Center in Rockford, Illinois.

of their efforts to improve community health, and contacted Jamie to see how they might work together.

What resulted were monthly walks at various forested areas around the county, including ANCA member <u>Severson</u> <u>Dells Nature Center</u>. These events, called Walk with Swedes, always featured a medical professional as well as special activities. The hospital promoted the walks to both employees and patients, and typically had over forty people in attendance.

Johannsen was pleased with those numbers, but also with seeing new faces. "They weren't the same people that are coming to all of our guided bird walks, they weren't the 'nature nerds," she said. On an organizational level, too, she now personally knows a variety of individuals within the health care system who could be allies in the future. "I hope to build on it in the future."

Another type of medical partnership is based on a "nature prescription," a concept that is gaining popularity. In this case, a doctor will literally write out a prescription for a patient to spend time in nature — say, for example, at least an hour each week.

These nature prescriptions are perhaps most well-known through <u>Park Rx America</u>, which connects medical professionals with publicly-accessible parks and natural areas for the benefit of patients. Park Rx America's platform uses a map with detailed information on such parks, so that a doctor can inform patients about natural areas closest to them and best-suited for their needs.

ANCA member <u>Ottawa County Parks and Recreation</u> in Michigan recently partnered with a local doctor to make nature prescriptions accessible for local healthcare professionals.

"What we did with the PHO [physician-hospital organization] was work with them to get not only our county parks in, but also to reach out to the other municipalities in the area and get their parks in as well," said Jessica VanGinhoven, Communications Specialist for Ottawa County Parks. "Certainly, as a county parks system we want people to go to county parks, but there's lots of city parks and township parks that are maybe more convenient for patients. And the end goal is really getting patients outside."

This effort required two volunteers to enter the park data and ensure accuracy for areas outside of the county parks system. "It was a lot of upfront, get all this data in. After that, if you're using the Park Rx America platform, once they're in, doctors can prescribe things at will," VanGinhoven said. "Any maintenance that we do is updating the information and making sure that any new trails that we add are added into the system, or if we keep pictures in there, [such as] trail

maps ... that stays updated."



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Autumn at Ottawa Sounds County Park in Ferrysburg, Michigan. Photo by Mike Lozon.

The initial prescription rate has been slower than expected since the program began in May, but VanGinhoven is optimistic about what the prescriptions can do for the community. And while the doctors are writing the prescriptions, VanGinhoven wants to focus on "making sure people are aware that this exists," she said. "It's great if a doctor is able to prescribe it, but it's also great as a patient if you're at your doctor's office, to say 'Hey have you heard of this?" We think this would be really positive, the fact that this relationship goes both ways."

At the 2019 ANCA Summit, keynote speaker Nina Simon discussed the importance of partnerships at the Santa Cruz Museum of Art and History where she was executive director, noting that the museum went from roughly 50 partnerships to over 2,000 during her tenure — which she connected to a nearly nine-fold increase in annual attendance at the museum for the same time period. Importantly, those partnerships enabled not only more *visitors*, but also more audiences than the museum had seen before.

Similarly, both Johannsen and VanGinhoven spoke to the significance of their organizations' respective medical partnerships. For Johannsen, it was important to make connections with healthcare professionals, which may enable nature prescriptions in the future. "I can talk to the community outreach people all day but if they don't know who in their program is interested in this ... then it's just the marketing people," she said. "Now they actually have some physicians that took part and see the potential."

VanGinhoven agreed. "As word starts to spread through your network, that idea can kind of catch fire. An example we have of that is that we're working on a bunch of campaigns and someone on our campaign committee is really well-connected to a hospital system in a different area ... so she's going to work on our behalf to try to roll it out in another area of the county," she said. "There's a lot of power in the network of the organization.

Service Review

Building ANCA's Leadership with You

By Kay Carlson | President & CEO Nature Center at Shaker Lakes — Shaker Heights, Ohio ANCA Board of Directors & Chair, ANCA Governance Committee

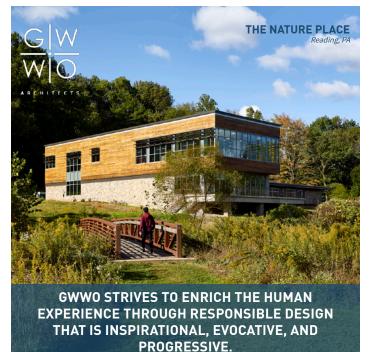
A re you interested in getting more involved in ANCA? There are many ways to get involved through committees and even the Board of Directors. The ANCA Governance Committee is continually working on building its future leadership and is always seeking people with an interest in serving on committees, short-term task forces, and/or the Board.

Joining an ANCA committee or task force is a great way to get involved without the commitment of becoming a Board member. It is also a great way to test the waters before indicating an interest in joining the Board. In addition, you get to meet fellow nature and environmental learning center staff from around the country; learn more about various management topics from colleagues (that you can then use at your own organization); share your own expertise with others; and to give back to ANCA with your time and talents. Think of it as free professional development for yourself that also helps ANCA and others! Our current lineup of Committees that are open to non-Board members and seeking new members include:

- Development Committee
- Marketing Committee
- Regional & Specialty Initiative Committee
- Residential Environmental Learning Center Steering Committee
 - Leadership Award Committee
- Summit Committee
- Summit Scholarship Committee
- Diversity, Equity & Inclusion Task force

If you are interested in joining a committee or task force, please contact Jen Levy at <u>jenlevy@natctr.org</u>.

The process of identifying Board candidates is an ongoing one and is conducted by the Governance Committee. The current Board members are charged with identifying and nominating candidates — understanding the need to have



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the ANCA membership represented as fairly and adequately as possible. When identifying candidates, current members of ANCA are considered, as well as active committee and task force members and retirees still involved in ANCA. In addition, the Committee considers the current Strategic Plan and how a candidate can contribute to our current priorities including creating a diverse, equitable, and inclusive membership.

Process for Identifying ANCA Board Candidates

- 1. Interested candidates and candidates identified by the Board or Board Governance Committee are submitted to a member of the Governance Committee or Jen Levy (ANCA Executive Director).
- 2. A member of the Governance Committee or Jen will contact potential candidates to discuss their interest in being considered for nomination to the Board at some point in the future. Those who are interested will be asked to fill out and submit a nomination application form for the Governance Committee to review.
- 3. Governance Committee will review Board vacancies and the needs for filling slots on the Board each year and then review potential candidates and identify those who would be a good match for serving the Board in a particular year.
- 4. Governance Committee will share potential candidates under consideration with the Board at its Winter meeting to get feedback and ideas for other candidates.
- 5. Governance Committee will present a final slate of candidates for the Board to vote on at the May/June meeting.
- 6. After the Board appointments are made, all current candidates are notified of the outcome. All Board prospect names are kept on file for future consideration if they are not nominated to fill a vacancy during that year.

The essential responsibilities of Board members can be found in the Board Job Description under the Resources section on ANCA's website <u>here</u>.

If you are seeking deeper involvement with ANCA and would like to be considered for potential future service on the Board of Directors, please contact Governance Committee Chair, Kay Carlson at <u>carlson@</u> <u>shakerlakes.org</u> or 216-321-5935 x227 or Jen Levy at <u>jenlevy@natctr.org</u> or 435-787-8209. Thank you!



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Corky McReynolds, PhD, CPF corky@leadteamconsulting.com leadteamconsulting.com

Feet On The Ground:

Recent & Upcoming ANCA Activities Around the World

See all these events and more on our online Event Calendar here

August 20-24, 2019: Cincinnati Nature Center in Cincinnati, OH hosted the 2019 ANCA Summit, which was the largest in ten years and featured a number of engaging speakers, workshops, and facilitated discussions, including keynote speaker Nina Simon.



Nina Simon delivers the keynote address at the 2019 ANCA Summit on August 22.

September 5, 2019: Gale Woods Farm in Minnetrista, MN, hosted a regional meeting to debrief and share resources from the ANCA Summit, share upcoming events/projects, and participate in a facilitated discussion around titles, salaries, staffing structure, and job descriptions. See more about the Minnesota Region here for more details.

October 11, 2019: Seven Ponds Nature Center in Dryden, MI hosted a regional meeting that included discussions on field tours, waste reduction, advocacy, and land stewardship. See more about the Michigan Region here for more details



Seven Ponds Nature Center hosts the Michigan Region meeting on October 11.

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Recent & Upcoming ANCA Activities Around the World



February 6-7, 2020: The ANCA Texas Region will meet at Westcave Outdoor Discovery Center in Round Mountain, TX to discuss the R's of facilities management: Revenue, Reservations, Rentals, and Registration. See more about the Texas Region <u>here</u> for more details.

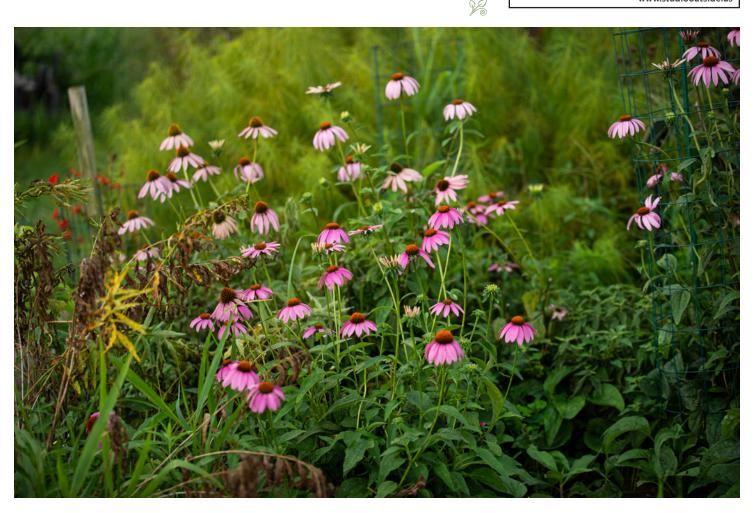
September 15-19, 2020: 2020 ANCA Heartland Summit at the Indian Creek Nature Center in Cedar Rapids, Iowa. Check back <u>here</u> for more details.

January 14-19, 2021: 2021 Residential Environmental Learning Center (RELC) Gathering at The Ecology School in Saco, ME. Check back <u>here</u> for more details.



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We're constantly seeking and sharing new resources that you can use at your own organization. Here are the newest additions to our <u>Resources in the Field</u> page.

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Everyday Advocacy Resources

The National Council of Nonprofits' collection of resources on advocacy.

DIVERSITY, EQUITY, & INCLUSION

Beetles: Examining Equitable and Inclusive Work Environments in EE

A nine-page document that examines "how environmental education organizations think about and operationalize equity and inclusion in the work environment," with emphasis on the perspectives of environmental educators of color.

OF/BY/FOR ALL Self-Assessment

A quick self-assessment to evaluate how your institution connects to your community and audiences.

PROGRAM RESOURCES & VISITOR SERVICES

Taylor Studios' "The Field Journal" Blog

A blog by Taylor Studios, a business that plans, designs and fabricates exhibits.



Build Resiliency for the Challenge of Change

Corky McReynolds, PhD, CPF | Founder and Principal LeadTeam Consulting

ANCA recently published a new article, "Build Resiliency for the Challenge of Change" by Dr. Corky McReynolds. Visit our <u>publications page</u> to see this and more resources to help you manage your organization. Below is a summary of McReynolds' article.

Change can be planned by or happen to an organization. When organizational change occurs, it can have a dramatic effect on its people, productivity, and processes. This change can be drastic for some and relatively easy going for others. This paper identifies Setting strategic direction, Creating a healthy culture, Practicing fiscal responsibility, and Investing in people as four core systems, that when functional and following best practices, will determine the capacity of an organization's ability to endure, embrace, and empower change.

The Dynamics of Change and Organizational Systems is a diagram illustrating the interrelationship between functional and non-functional systems and the effect of change. When one or more of the four systems are dysfunctional, change will take longer, bring more challenges, and inhibit lasting achievements. When all four of the core systems are functioning well then change will allow for longer lasting achievements, greater impact, and less challenges.

Leaders and teams can use this model to assess the capacity of their core systems that will aid in the success of change and to assess their role and impact to overcome the challenges of change. \Im

