

Inspiring Visitors' Scientific Inquiry

by Transforming an Interpreter's Science Communication

Science is wicked cool! So why has my enthusiasm for it dwindled significantly over six years in the role of National Park Service interpretation/education? Do I have the correct methods to provoke visitors' scientific curiosity? Do I have the correct methods to increase visitors' scientific literacy?

In my experience, during the typical two- to four-week seasonal training, scientific research is usually presented in "sound bites," resulting in my superficial understanding of park science. Combined with assuming that visitors prefer quick answers rather than scientific details, I found myself didactically regurgitating

simplified scientific results to visitors. Despite my best attempts to provoke visitors' wonderment, increasingly felt like a walking encyclopedia and my scientific curiosity dwindled. I lacked the necessary tools to spark visitors' scientific inquiry and wonder.

However, a new model has enabled me to ignite visitors' scientific curiosity and understanding. Interpreters and Scientists Working on Our Parks (iSWOOP). iSWOOP empowers interpreters to communicate science in an engaging fashion that fosters visitors' scientific inquiry. Re-connecting with

my own curiosity has enabled me to adopt this new model successfully.

The iPhone with an attached thermal camera captivated me while I was attending iSWOOP training at Carlsbad Caverns National Park. "Cool! How much does this cost? I want one!" I asked out loud. The facilitator did not give me the answer, so I discovered the answer myself using my iPhone: \$250. We were learning how to use thermal camera technology to engage visitors and discuss how it enabled researchers to obtain an accurate bat population count. My excitement for science communication was being re-kindled.

In the table compare iSWOOP's approach to the traditional style of communicating science:

To successfully develop an iSWOOP program, one needs a researcher, stories about the research process, intriguing visuals or props, and interactive techniques to start relevant conversations that raise visitors' awareness about National Park-based research. Where can interpreters get briefed on current park research if iSWOOP isn't scheduling scientists to come spend time with interpreters at your park? Most times, the shared drive is a rabbit hole, inefficient for accessing an overview of recent cutting edge studies. The internet is usually the go-to for accessing research names and access to repositories for science papers. If you're interested in integrating park research into your formal and nonformal programming, check out the vast store of research briefs available on the Inventory and Monitoring (I&M) Networks, Research and Learning Centers (RLCs), and the Integrated Resource Management Application (IRMA) websites.

Between jobs, I recently worked on the iSWOOP project, collecting and analyzing over 100 research briefs generated by RLCs and I&M. These are intended for interpreters' use, and so project director Martha Merson and I characterized the sample, paying attention to various attributes such as readability, type of visuals, subheads, story potential and more. RLC and I&M briefs reveal the vast array of scientific research and extent

of inventory/monitoring efforts across national parks: wildlife, endangered plants, species relationships, and abiotic topics such as water quality. The brief two-page summaries lend themselves to interpreters quickly understanding the essence of the project.

Half of the briefs contained relevance to park management, but only a handful included relevance