Brief Bio and (PR)²: Problems & Pitches – Rants & Raves by *Martin Storksdieck*



Dr. Martin Storksdieck is Director of Project Development at the Institute for Learning Innovation (ILI), which is located close to the Chesapeake Bay in Edgewater, Maryland. His work as educational researcher and evaluator in free-choice, informal, elective contexts, environments or settings is quite diverse, and ranges from environment, nature and conservation to astronomy and current science. His areas of interest include factors that influence what and how we learn when we do so voluntarily in our spare time and how this "learning" impacts our behaviors, identities and beliefs; the role of volunteerism, serious leisure, and citizen science in a lifelong learning society; the role of visualization and immersion in learning; and how schools and out-of-school learning can be mutually enhancing in creating and sustaining lifelong interest in (science) learning.

Martin is currently conducting evaluation and research studies in collaboration with organizations such as the Chabot Space & Science Center in Oakland, CA; the Astronomical Society of the Pacific in San Francisco; the Pacific Science Center, Seattle; the New York Hall of Science; the US Botanic Garden or the NOAA Marine Sanctuary Program. Aside from basic research, Martin has been conducting numerous evaluation studies since joining ILI in 2001, for science centers, science and natural history museums, conservation organizations, nature centers, zoos, aquaria, botanic gardens, scientific societies or universities. Martin started his career in the informal/free-choice science education arena as a producer and educator at a planetarium in Germany. Before that he worked as an environmental management consultant, and served as editor, host, and producer for a weekly environmental news broadcast. His Ph.D. is in Education, and he holds a Masters in Public Administration and a Masters in Science.

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General Questions

1) What is (are) your main interest(s) in attending the workshop?

My research interests are linked to the public understanding of the processes and contents or results of science. Our understanding of science is increasingly mediated through models, metaphors, and visualizations, based on pattern recognition within large sets of numbers, and the question is to what degree these complex mechanisms of making sense of the world are important to communicate to the public.

2) What information/knowledge management needs do you have? Explain your 'dream tool' for scientific discovery and innovation.

Like every (inter- and transdisciplinary) researcher, I now suffer from information overload and need to find better and more effective ways to gather, select and synthesize information from a wide variety of sources. The same is true for any person. But how do we select and trust the sources? "Media literacy" was seen as a crucial component in the later 60s and early 70s for everybody's education. What is the equivalent of today? "Data literacy"?

3) What is the most insightful visualization of static or dynamic phenomena you know? *[Ideally this visualization led to a major discovery/innovation. Examples could come from science, art, or any other field of human endeavor. Note that we plan to use this visualization on your name card.]*

I evaluate how people make sense of visualizations, and in general it seems that our ability to create complex visualizations seems to get the better of us these days.

Personally, I enjoyed very much the data visualization of an F3 tornado created by Donna Cox and her team.

4) What would you like to learn / achieve at the workshop?

Where is all this going, and what of it needs to be communicated to the public?