

# Exploratory Study Findings: Poetry & Science in Natural History Museums & Libraries

**Project:** **Discovering the Natural World through Poetry at Libraries & Natural History Museums**

IMLS Grant #LG-55-14-0148-14

November 25, 2015

**For:** **Lee Briccetti, Executive Director, Poets House**

**By:** John Fraser and Kate Flinger

**Correspondence:** [jfraser@newknowledge.org](mailto:jfraser@newknowledge.org)

**NewKnowledge Publication** #IMLS.78.172.02

## Executive Summary

In 2014 Poets House received a planning grant from the Institute of Museum and Library Services for *Discovering the Natural World through Poetry at Libraries & Natural History Museums*. Activities included discussions among the project team about how to support learning in a hybrid program; a two-day set of pilot public event experiments at the Oakland Museum of California and the Oakland Public Library; and a one-day workshop for poets, scientists, museum and library leaders, and researchers to explore the potential of poetry and science to promote deeper public connection to the natural world and broadened thinking within libraries, museums, and literary institutions about interdisciplinary collaborations.

This effort revealed a high level of interest in interdisciplinary poetry and natural history science co-programming. Programming leaders at libraries and natural history museums are open to experimenting with new models of public engagement. Library and natural history museum staff, poets and natural history scientists were unfamiliar with collaborative programming that crosses institutional and disciplinary boundaries. The study identified desire for knowledge about co-programming despite discernable discomfort with moving outside disciplinary norms. There appeared to be a tacit set of cultural differences that limited what institutions and professionals offered, though professionals and their audiences demonstrated that the convergence discovered between the two was highly desirable. To support a full-scale implementation project, the evaluators recommend a two-phase, facilitated approach to develop new tools and test new professional training techniques. We anticipate this approach would support professional practice with poetry and science co-programming and scaffold new possibilities for collaboration between humanities and natural sciences.

## INTRODUCTION

In 2014 Poets House received a planning grant from the Institute of Museum and Library Services for *Discovering the Natural World through Poetry at Libraries & Natural History Museums* (grant # LG-55-14-0148-14). The goal of the grant was to plan an effective strategy for promoting deeper audience connection to the natural world through poetry and to broaden thinking within libraries, museums, and literary institutions about creative, interdisciplinary transmission of knowledge about the natural world.

Poets House convened a team of organizations to participate in the planning grant: the Oakland Museum of California and Oakland Public Library hosted experimental events and New Knowledge Organization Ltd. (NewKnowledge) served as external evaluators and facilitated some of the meetings aimed at understanding perspectives from different groups. The project initially included support in New York from the American Museum of Natural History, but due to scheduling conflicts and transitions in leadership that organization withdrew from the project and the Newark Museum stepped in to fill that role.

The public testing encompassed two public events in Oakland and an interdisciplinary discussion forum in New York. First, in May 2015 the Oakland Museum of California and Oakland Public Library hosted a two-day public event for scientists, poets, and the public. The experimental event featured talks and activities led by scientists, poets reading their original work, writing activities for attendees, and discussions in both the museum and the library. Second, in July 2015 Poets House hosted a workshop for poets, scientists, museum and library leaders, and natural history researchers at their New York City library. The workshop attendees talked about a vision for a full-scale national poetry and natural history museum program and what the needs for that program might entail.

In this report, NewKnowledge presents a summary of the evaluation findings. Our objective was to learn about how the public experienced the work, how disciplinary specialists interpret the challenge, and make recommendations for how to 1) foster long-term, collaborative partnerships between libraries, poets, and natural history museums; 2) bring to the public meaningful encounters with the natural world; and 3) fully engage libraries, natural history museums, and literary institutions in co-developing tools for collaboration.

## METHODS

NewKnowledge hosted online discussion groups for the members of the public who attended the event in Oakland and professionals who work at the museum and library. From the poets, we collected written reflections via email. Lastly, we co-facilitated and had a second researcher undertake a phenomenological observation of the workshop in New York City.

All of these techniques were part of our *hermeneutic phenomenological* approach. With this approach, we acknowledge that all parts of society have meaning for the people who experience them (Merleau-Ponty, 1962/2006; van Manen, 2014). We listened and watched everything that happened to describe the experience of the people and institutions involved. This deep listening and watching preceded the application of theory and hypothesis development about the project so we could bring to light possible opportunities, as well as strengths and limitations of a large-scale implementation of this project in the future.

### Participants

About 40 people attended the event at Oakland Museum of California and Oakland Public Library. These attendees seemed to be members of the general public who were regular users of the museum or library. For the library, most specifically chose to attend the event, while at the museum, the event was part of a regular evening program and most participants were opportunistic, electing to attend this program after they stumbled upon it as part of the larger regular event. Some attendees had previous knowledge of the poets' work or personally knew them. Five poets took part in the event, in addition to a handful of staff and curators from the museum and library.

Twenty people attended the workshop at Poets House in New York City, poets, scientists, museum and library leaders, and researchers. One of the NewKnowledge researchers co-facilitated the workshop with Poets House's executive director.

## FINDINGS

### Experimental Models in Oakland

The partners in Oakland experimented with two ways to put together poetry and science programming in a cross-institutional partnership. The Oakland Museum of California hosted a roving poetry reading. Poets led the group from gallery to gallery for short readings of original work. Standing in the dim, dramatically lit

natural history exhibits, poets recited work about migratory patterns, insects, and other natural history phenomena. For instance, in front of a pine forest exhibit, the poet Cedar Sigo read,

*There is the lute player in the tree  
And the thinnest purple dragonflies  
Different from the zebra-flecked antennae  
Of our last little wandering*

Staff from the library also brought its Bike Library, a small shelf of natural history books mounted on a cart and attached to a bike. They loaned books to people attending the poetry program in the main hall, but could not follow the group throughout the galleries due to space and event logistics. The day of the poetry program at the Oakland Museum of California, the museum also hosted its Friday programming, where visitors paid half-price admission to see music performances, eat at food trucks, purchase work from artists, and other activities beside the poetry experiences.

The event continued the next day at the Oakland Public Library. Among the shelves of the reference section, attendees trickled in and out of the program led by Jane Hirshfield, a local celebrity and nationally recognized poet, and Sarah Seiter, a natural history curator from the museum. Instead of offering a typical poetry reading, Hirshfield discussed her poetry in the context of natural history, her inspirations, and how the work related to scientific meaning. After listening to the poetry talk, attendees examined a series of bird nests from the museum collection. With the nests as their muse, they penned their own poems to discuss with the group.

We observed moments when the project's vision for promoting a deeper connection between people and the natural world became palpable. One attendee reflected on his experience as a shift in thinking using multiple channels of inquiry. All who responded to questions about their experience at either the museum or library valued the experience of combining poetry with science content and spaces. They had not experienced events like this before, but saw great potential for the co-programming of poetry and science leading to new ways of understanding a phenomenon. Perhaps because they were unfamiliar with this type of programming, some participants seemed to struggle with how to articulate what they had gained or found challenging about the experience.

In reflecting on the experience in Oakland, we saw several ways that groups viewed their role in communicating about the natural world. It seemed that poets and scientists feel they share a

common enterprise, exploring the conditions of the natural world. A scientist remarked that she would like to see people understand that scientists and poets do the same kind of thing. A poet elaborated on this idea in an email about his own work process, writing, *I often feel like an architect when I am in the throes of composing poetry. You have to be clear and accurate as in science to make a breakthrough. You must interrogate your materials.* Both attendees and other poets reflected on how the program blurred the boundaries between the two disciplines and offered an opportunity to understand common themes in the disciplines that they had not seen before.

We observed some challenges for both the institutions and the participants. The host institutions focused more on their own purpose as the dominant form of the program, rather than attempting to consider how both institutions might have a common goal. In the museum experiment, logistical challenges included attendees and poets finding the migration to be disruptive as they moved from one exhibit to another at the speed of a traditional museum tour, without time to reflect, share, or negotiate meaning that arose during reading in the exhibit context. Poets said that the intermittent announcements from museum staff about the program were distracting and seemed inappropriate at a "poetry reading" suggesting that a reading format is not ideal for an active museum environment.

Library staff attending the event at the Oakland Museum remarked that very few people noticed the Library Bike. This may be simply a function of the event structure, but may also speak to the difference between advertising presence and integrated co-programming. For example, the library could have elected to pair a natural history book and a poetry book as a "tandem check-out opportunity" on their bike library as a way of breaking with the library filing system in the spirit of the program. Instead, the Library Bike may have been perceived as an exhibit rather than an exploration in co-programming because it seemed similar to other cultural history artifacts in that area. All attendees said that people who came for the museum's regular half-price Friday event made the space noisy and rambunctious, something that is unusual at traditional poetry readings but might create a unique type of experience if that cultural form is incorporated in the programming strategy and planning for the event. All reactions pointed to the concern that the experiment had difficulty overcoming perceived norms for poetry readings by those familiar with the form or that more attention is required to familiarize presenters with the norms of the environments they are entering.

At the library event the poet led the majority of the program, while the natural history curator seemed hesitant to offer a perspective on the science aspects of the nests or the poet's work. Curious about the curator's role, attendees wished that she had brought more of her expertise to the discussion. In her own written reflection, the science curator suggested that the event was primarily an arts program, and did not comment on whether she might have had a role in shaping the program. The program's location in the reference section frustrated some attendees and other patrons. While the poet's appreciation for science was greatly appreciated by attendees, the scientist did not engage in the dialogue about how poetry might impact her own work.

In spite of the enthusiasm witnessed among participants, we observed that presenters and visitors seemed to gravitate toward traditional presentation structures, highlighting cultural differences between the disciplines rather than entering into an exchange of ideas. Some poets felt uncomfortable with the museum, as if they were transgressing an unspoken exclusion. Rarely invited to the museum, they saw themselves as temporary guests rather than new partners whose voices could influence the cultural experience at the museum. Poets also seemed to feel alienated by what they perceived as business-like treatment by the staff rather than a deeper collaborative exchange. Some poets said they felt the museum's exhibit text followed a textbook-style that lacks a sense of liveliness.

We note that the timeline for this one time experiment was quick, something that museum staff felt comfortable accommodating. In contrast, library staff were excited to be part of the project, but felt challenged by the same rapid timeline. They thought they did not have enough time to put together entirely new programming and were at a loss to consider how to guide the two program facilitators (the poet and the natural history curator).

The poets pointed out that financial support offered through this planning grant was very important to them. They thought their honorarium for participating in the museum program was reasonable. Typically, they remarked, financial support for poets is modest, which may have led them to engage in the program but may also have led to the assumption that they were expected to deliver an expert poetry reading based on past practice rather than engage with something more experimental.

### The New York Workshop

Poets House convened a diverse group of poets, scientists, Poets House staff, researchers, and library and museum programming experts. The daylong workshop reflected a similar level of enthusiasm, interest, and commitment to the project that we observed in the Oakland programming.

The workshop attendees discussed a range of priorities for a full-scale national program, as well as the value of poetry and science as disciplines. From a library programming perspective, attendees commented on how one-size-fits-all programming does not work well in urban settings. Library staff focus on tailoring programs for specific branch level communities to ensure that their service population will find these programs relevant. The library programming staff noted that drawing a diverse audience from many different neighborhoods to onsite library programming is a challenge for many institutions. On the other hand, they felt that libraries across the country excel in the role of social service: identifying and providing access to resources that their communities value. Community partnerships have been and are increasingly part of the social service work of libraries.

Attendees spoke about the unique needs and strengths of natural history museums. These institutions have visually compelling spaces and can easily leverage the expertise of staff and volunteers. Museums, by virtue of their space and in-house disciplinary specialist staff are able to facilitate onsite programs that draw science fans. Recently, they noted that museum workers across the US have begun to bring programming outside of museums' walls. Natural history museums are particularly well situated for this type of activity with their content expertise as well as their access to outdoor areas and research facilities that may not always be open to the public.

The poets highlighted similarities in the production of scientific knowledge and poetry creation: both describe the need to pay acute attention to the world in order to understand and describe how it works. One poet felt that the primary goal of a full-scale collaboration should not be to increase the public's involvement in poetry or science. Rather, she suggested that the project should inspire curiosity by asking big questions about the world. Poets indicated that they believe science and poetry share more than is commonly thought, relying both on analysis and emotion. They pointed to the ritual of *reading the world* and how that process involves emotions like dismay, frustration, and fear. Some of the poets discussed consideration of other ways of knowing and

acknowledgement of other worldviews such as that of Indigenous cultures, and an effort to engage personal agency and passion as other ways to advance project goals through co-programming.

Scientists stated that they value how programming can engage the public in both the scientific content and the scientific process. One scientist speculated about how programming with poets may challenge participating scientists to think of different ways to take their research public. The scientists attending this event seemed open to collaborating with poets, suggesting that inviting poets into museums could support exhibits in unexpected ways and *fill the gap* where science had trouble conveying ideas or attracting audiences.

The entire workshop group debated many approaches, tools, and types of programming that could be used in the full-scale implementation of the program. They discussed the possibility of poet-in-residence opportunities, exhibit outreach programming at libraries, scientist and poet-led tours, using poetry and science to prompt development of interpretation through the public's own photography, and other techniques.

## DISCUSSION

### The National Context

The *Discovering the Natural World through Poetry at Libraries & Natural History Museums* planning grant has offered an opportunity to lay the groundwork for the first nationwide initiative to support engaged library and natural history collaborations through co-programming of poetry and natural history disciplines. The project builds on past initiatives, where federal agencies, institutional programming directors, and foundations have supported pioneering work that planted the seeds for collaboration across the library and museum fields.

In particular, Poets House led *The Language of Conservation: Poetry in Library & Zoo Collaborations*, an IMLS-funded initiative drawing together exhibit planners, poets, and zoo conservationists to create poetry installations in zoos across the US and to create shared programming with libraries. There have also been noteworthy public events at the institutional level, such as *The Poetic Species: A Conversation with E.O. Wilson and Robert Hass*, a public discussion between a sociobiologist and poet at the American Museum of Natural History in New York City (Wilson & Haas, 2014). Other natural history museums, libraries, and literary organizations have experimented with small-scale collaborations,

such as poet-in-residence at museums and public panel discussions.

These experiments at cross-programming or co-programming continue to show promise, but it appears that conflicts in pedagogies have yet to be resolved in a way that points to a clear strategy for successful, equal collaborations at the disciplinary level. The goal for partnerships has always been to create a reciprocal exchange between the humanities and the sciences. It appears that poets feel they meaningfully draw from the natural history studies. Meanwhile, natural history scientists often feel they learn through interactions with poets, but default to a more instrumental approach to have poets translate disciplinary science to an unknowing public.

*Discovering the Natural World through Poetry in Libraries & Natural History Museums* revealed an opportunity to help shift the movement from a purely instrumental use of one discipline to advance the goals of the other, to a clearer exploration of the reciprocal benefit that happens when both disciplines are perceived as equals. The project suggests that it is possible to deeply engage the public in a highly desired new kind of informal learning experience. Accomplishing this goal will require more extensive work developing training tools to support programming staff in scaffolding reciprocal exchanges between poets and natural history scientists.

We have observed in other organizations across the US – most notably, the American Library Association (ALA) through support of the Bill & Melinda Gates Foundation and the National Endowment for the Humanities – the skill development needs of library professionals to work as social service providers for their communities. In programs like *Libraries Transforming Communities* and *Bridging Cultures: Muslim Journeys*, ALA has enabled libraries and library professionals to serve communities' needs for public programs. Specifically, these programs have sought to meet cultural needs by facilitating intellectual inquiry within the community, developing techniques to promote cultural understanding, and guiding institutional collaboration that recognizes equal contributions from all partners. In these cases, it became apparent that substantial training is needed for co-programming. The divide noted here in the *Discovering the Natural World through Poetry* project suggests that despite the interest, real world application requires careful attention to how poets and scientists are asked to talk about their prior interests, discovering means to facilitate a learning discussion that benefits all

professionals, and developing ways to use that learning to create a public dialogue that can reveal to the public the nature of the respectful learning exchange.

Following IMLS's strategic vision, Poets House and its partners are positioned at the forefront of emerging learning and community initiatives in the US. Specifically, a nationwide program to support extensive, learning-focused programming will support IMLS's strategic goal to *place the learner at the center and support engaging experiences in libraries and museums that prepare people to be full participants in their local communities and our global society* (IMLS 2013). We anticipate that programs resulting from an implementation of this project will begin to equip both practitioners and the public with tools needed for expansive, cross-disciplinary learning. This type of learning may lead to civic-minded participation and problem solving at the community level. The national program will also *promote museums and libraries as strong community anchors that enhance civic engagement, cultural opportunities, and economic vitality* (IMLS 2013). The sustained collaborations envisioned for this project stand to benefit communities by encouraging libraries and museums to move beyond traditional silos and imagine new possibilities for serving their communities' learning needs. The combined effort made by partnering institutions will be more than the sum of their parts – libraries and natural history museums possessing unique expertise can accomplish more together than they can apart.

### Strengths & Challenges

This planning study found that experimentation and collaborative work with poetry and natural history science does not flow naturally for experienced leaders in natural history interpretation or library programming. Despite the convergence in interests by those in each of the disciplinary silos, there is no applied experience to enable this programming. On the surface, we observed strengths in the Oakland events and the New York City workshop. Everyone who took part in even a small portion of the project demonstrated enthusiasm for co-created programs featuring poetry and science like the experiment hosted by the Oakland Public Library and the Oakland Museum of California. Workshop participants were even more excited about the possibilities for a nationwide initiative to sustain this collaborative work. They envisioned this program changing the way the public thinks about the natural world and how these institutions serve their learning goals. But the pathway was unclear because they could not name any similar analogues.

The Poets House training model for *Poetry in the Branches*, the Gates Foundation-funded *Libraries Transforming Communities*, and the Poets House-led *Language of Conservation* have all established training practices that hold key strategies for advancing this work. In each case, the program design engaged scholars from multiple disciplines in carefully guided discussion forums that lasted over multiple days. These program models recognize that toolkits are needed and that professionals require time to develop trust, to identify opportunities for the reciprocal exchange of ideas, and practice in active appreciative listening from all parties to build new ideas that did not exist before the exchange.

In this case, as evaluators, we believe that similar programs can be developed but that that effort will require time and investment with a small group of partners to develop a replicable model, to fully articulate opportunities, and to identify potential pitfalls or challenges through active testing. While the Oakland experiment revealed certain possibilities and challenges, the New York workshop identified the potential that could emerge from an extended focused workshop and long-term planning to engage natural history scientists and poets in a shared dialogue that can surface public experience opportunities and strategies.

The project brought together distinct groups with special traditions, skills, and expectations. We found that these groups – poets, scientists, the public, museum professionals, and library professionals – are sub-cultures unto themselves. Their differences brought both affinity and tension to the program that will determine the shape of this initiative. They used terms that showed they had latent biases about the differences between poetry and science. Specifically, they assumed poetry would serve an instrumental purpose for the needs of science. In other words, they believe poetry is needed (e.g., *fills the gap*) when science cannot accomplish its communication goals by itself.

This language and the embedded assumptions it belies demonstrates a perception that science and poetry are not equal in their pursuit of exploring the natural world. There were some exceptions where individuals understood the joint vision of poetry and science, but it seems many of the participants at the workshops or the public events still perceive poetry as a programmatic add-on relegated to a communications role. In the minds of participants, poetry and science did not seem to be equal partners in the pursuit of exploring the natural world, wherein each provides worthwhile tools for inquiry.

However, during the course of the workshop participating scientists came to see poetry as contributing substantially to their own creative process. Paraphrasing and summarizing a leading geneticist from the workshop, *I do a lot of outreach, but this is the kind of thing I want to do for me because it feeds my mind.*

We anticipate many future collaborators – whether they are scientists, poets, museum, or library experts – will share this preconception, that science is solely for inquiry and poetry is solely for communication. Therefore, we recommend that program development focus on how to address this common bias.

Poets who participated in the programs also suggested that disciplinary natural history science was a source of professional fascination at the moral and metaphysical level, a source of poetic inspiration that led them to think about the human condition. While this inspiration was considered incredibly valuable to poetry development, these same poets were challenged to explain how natural history science might be a source of poetry programming in and of itself. They seemed to consider the point of departure insufficiently grounded in a professional poets' process to fully support programming about poetry about the natural world. However, after an exploration of their own sources of inspiration, they were able to see the rich creative content that could emerge through their dialogues across disciplines.

It seems that the disciplinary limits placed on poetry and natural history presentations can be overcome by programming professionals if these individuals are given the resources to engage with scientists and poets over an extended period of time, and if they are given the skills for these types of dialogues.

Overcoming these professional silos will require development of a program that carefully stages the construction of a shared understanding and development of a common language among humanities scholars and scientists, among museum professionals and library staff to guide program development and link to the range of resources each have at their disposal. It seems that success will only be achieved when all groups' contributions are considered equally meaningful to the project. This co-creation will enable public program experiences to move beyond traditional disciplinary presentation strategies and create an engaged creative learning opportunity for all. This work will require investment in sustained partnership and involvement from social scientists to guide facilitation practices. It will also require a commitment from poets, scientists, and library and museum professionals to a new

type of hybrid program that is based on active appreciation of one another rather than presentation of scholarly traditions from a position of expertise. Each group, by virtue of their expertise, will continue to bring unique assets to the project if they are given the platforms to do so. But a successful program will also reveal the thought processes as the disciplines collide, mesh, or diverge as they seek to characterize the human experience of the natural world.

## LOOKING AHEAD: RECOMMENDATIONS

Findings from this planning grant suggest that an implementation program will require a two-phase, facilitated approach to creating tools for programming and institutional collaboration.

**Two Phases** - We recommend a two-phase project design, in which the first phase would focus on experimental development of a program and pilot toolkit to support priority alignment and skills training based on tactics common to negotiation or community organizing. This new set of tools would be developed in collaboration with a committed group of partners and would require limited pilot testing at a few sites to identify practice techniques, likely over a full year of experimentation. Based on the challenges identified in this study, we recommend support for both a poet and a natural history scientist to have residencies that bridge the library and the natural history museum. Through active support and reflective process with social scientists, we believe it will be possible to identify the process for encouraging collaboration in the uncharted territory between the humanities and sciences. We suggest that this phase seek to identify principles of practice that could then be codified for pilot testing in a limited number of settings to seek public input and a new model for co-programming.

Based on the tentative nature of this project, we recommend second phase broader replication in a limited number of cities, where libraries /literary organizations and natural history museums could test the new tools and training. Ideally, we suggest 8 - 10 test sites for the new set of tools to fully validate the strategy across a range of conditions and confirm impacts before nationwide dissemination.

**Facilitating a Cultural Shift** – We observed that programming collaborations between libraries and natural history museums, much less poets and scientists, is uncharted territory. These groups each focus on different types of meaning with enough jargon to consider them unique cultures. They each perceive that

what they value is different from the other disciplines and likely under-appreciated by those who wish to enter the conversation from another practice area. We suggest that a successful program will require facilitation by an independent facilitator who can navigate self-awareness of the cultural assumptions of each group, particularly in development of the program. Facilitation will help these groups articulate priorities and align goals so they can work as partners of equal standing. We believe these skills can be the value provided by library professionals or museum leaders if the training tools are developed as outlined here. We suggest that an advisory panel including a select few disciplinary specialists who believe that collaboration is possible, supplemented by professionals skilled in cultural negotiation and mediation can develop these tools as part of an implementation phase.

**New Models** – The planning effort has demonstrated that the type of poetry and science collaborations now proposed expands on the initial work with zoo displays led by a single poet-in-residence and associated collections or program support at libraries. This new model demonstrates that integrated co-programming that fully engages libraries as equal partners will involve new techniques that require more investment in establishing common cultural understanding and skills for co-creation programming. The tools and techniques to be developed are entirely new professional skills for all participants, from public programs professionals at museums and libraries to the disciplinary poets and scientists, as well as affinity attendees. It is possible that legacy products could include poetry integrated into static or interactive exhibits but that alone will not surface the value sought by the audiences identified in this test. In a similar vein, displays or library reading lists that sample from natural history science and poetry might create a “mixed-taste” sampler that contrasts with the typical type of reading opportunity shared by more traditional presentations. Encouraging writing in the museum galleries may help people experience for themselves the creative inquiry of both science and poetry. As some workshop participants suggested, programs that start at one venue like the library and then travel to the museum for a second wave of experience, then reconvene again at a library may offer rich new cultural programming. And offering the literary interests and poetic inspirations of scientists as part of library programs will also likely help program participants expand their own thinking about the natural world and may spark serendipitous learning and creative thinking.

**Types of Learning** –The evaluators were particularly interested in how artifacts used in the experimental programs shifted the

dimension of the programming workshop. The museum collections invigorated an entirely new way of seeing the natural world through poetry writing exercises. The poets’ experience in the natural history exhibit space fostered dialogues that were more deeply engrained in personal responsibility than audiences were expecting, learning that was of high interest to those at the library programs. These types of learning could be planned as kinesthetic experiences where people physically take part in a program or as a strategy for exploring humanities content and moral reasoning rather than the traditional listening events. These strategies can contribute to new levels of understanding and literary inspiration that could attract participants with a range of experiences, including those who see themselves as leaders in the humanities or sciences. By combining poetry and science encounters with physical space, artifact exploration, and literary history is an entirely new way of engaging audiences in creative thinking, interpersonal dialogues, and other ways of knowing.

**Thinking Outside of Four Walls** – We note that the influence of the environment surfaced more prominently than we anticipated at the outset. Tacit codes of user behavior in museums and libraries may have undermined the goal of presenting an equal collaboration. At both the museum and the library, behavioral norms suggested compliance and expectation for a type of stimulus that created an “otherness” for the partners’ efforts. To fully explore this program in development, we recommend experimentation with a neutral location for some portion of the programming, outside of museums or libraries where power may flow to the host. Removing the formal structure of these spaces may help promote more creative development, build trust, and lead to new opportunities for reciprocal exchange that reduce the presence of institutional authority or expectation in a program.

**The Toolbox** – Most importantly, the potential users for this type of program require a carefully designed process toolbox that outlines requirements for time investment, step by step processes for developing trust, and guides to help them track success. Tools could include guidelines for establishing partnerships with other institutions, how to support relationship building, dialogue management for scientist and humanities professionals, and how to assess co-programming development, implementation, and monitoring. We suggest that these guides might benefit from illustrations and documentary photography and/or videography to illustrate case studies of prototype programs to help professionals visualize implementation and success.



## CONCLUSION

At the conclusion of this planning process, the evaluation suggests that there is much potential in creating co-programming with scientists and poets working across the cultural sector through co-facilitation by libraries and natural history museums. This effort at cultural bridging appears to have the potential to deconstruct traditional disciplinary cultures that make co-programming far from public expectation. The results of this process results suggest that co-created experiences will require that professionals build trust and skills with reciprocal exchange between all disciplines, institutional and academic disciplines.

We have suggested a path for careful planning and programming by professionals that can help develop strategies for bridging the disciplinary solitudes. The initial results suggest that it is possible to develop a new replicable model for co-creating and co-programming with live experiences and collections support that brings libraries and natural history museums together through poetry and science explorations, programming, and collections enhancements. We offered examples such as interpretive panels in museums that use poetry or book recommendations at libraries as “read-together” investigations with two disciplines. The potential for partnerships appear to be rich, of high public interest, and of great value to the disciplinary specialists who feel that residencies will be professionally rewarding. We suggest that a carefully designed set of tools and training strategies can help libraries and museums forge new opportunities for serving their communities. This work may also help the public and disciplinary experts find new value in their cultural institutions.

## REFERENCES

- Institute of Museum and Library Services. (2013.) *Creating a Community of Learners: Strategic Plan 2012-2016*. Retrieved from <https://www.imls.gov/sites/default/files/legacy/assets/1/AssetManager/StrategicPlan2012-16.pdf>.
- Merleau-Ponty, M. (1962, 2006). *Phenomenology of perception*. New York, NY: Routledge.
- Poets House (undated). *Poetry In the branches source book*. New York: Poets House.
- Preston, J. (Ed.). (2013). *The Language of Conservation: Poetry in Library & Zoo Collaborations*. Retrieved from [http://www.poetshouse.org/uploads/supporting-files/Poetry-in-the-world/LOC\\_2013.pdf](http://www.poetshouse.org/uploads/supporting-files/Poetry-in-the-world/LOC_2013.pdf).
- The Harwood Institute for Public Innovation. (2015). *A Step-by-Step Guide to “Turning Outward” to Your Community*. The Harwood Institute for Public Innovation. Retrieved from [http://www.ala.org/transforminglibraries/sites/ala.org.transforminglibraries/files/content/LTCGettingStarted\\_DigitalWorkbook\\_final010915.pdf](http://www.ala.org/transforminglibraries/sites/ala.org.transforminglibraries/files/content/LTCGettingStarted_DigitalWorkbook_final010915.pdf)
- Van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Walnut Creek, CA: Left Coast Press.
- Wilson, E.O. & Hass, R. (2014). *The Poetic Species: A Conversation with Edward O. Wilson and Robert Hass*. New York, NY: Bellevue Literary Press.



*Exploratory Study Findings: Poetry & Science in Natural History Museums and Libraries (#IMLS.78.172.02)* by NewKnowledge.org is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.

## New Knowledge Organization Ltd.

*Facing Society's Grand Challenges Head On*

tel: (347) 766-3399  
13 East 37<sup>th</sup> Street, 7<sup>th</sup> FL  
New York, NY 10016

tel: (760) 576-4010  
3630 Ocean Ranch Blvd.  
Oceanside, CA 92056