

Introduction to the Incorporating K-12 Outreach into Digitized Collections Programs Workshop

Justification and Rationale: K-12 educators and learners are a large and deserving audience for outreach activities associated with scientific projects, and are often incorporated into the statement of Broader Impacts of NSF proposals. Science is increasingly emphasized in K-12 classrooms and compliments current STEM and STEAM educational initiatives, and all successful K-12 programs must link activities to state and national science standards, for example NGSS (Next Generation Science Standards). Understanding and linking to state and national science standards is also crucial to create a relevant and useful resource. These standards provide a framework that empowers teachers to promote greater student initiative and leadership in developing research questions and inquiry and experiential learning based investigations.

Although scientists are interested in working with K-12 educators and learners as part of their educational outreach activities, not many understand how to effectively design, execute, or evaluate a successful K-12 program or how to begin and maintain a working relationship with K-12 educators and administrators. The proposed workshop will provide an opportunity for experts in both collections and education to interact, share knowledge, discuss challenges and issues, and ultimately collaborate on a best practices document that can be shared with the greater collections community.

Goals: Workshop goals include: (1) increase awareness of multiple strategies to effectively engage with K-12 learners and educators, (2) increase understanding of educational standards, (3) increase skill at aligning learning objectives with goals of ADBC/NIBA, (3) increase awareness of issues pertaining to accessibility to diverse and marginalized groups, (4) increased awareness of how high stakes testing, and technological barriers impacts teachers ability to incorporate novel activities into the classroom.

Deliverables: (1) Participants will collaborate to create a draft document of best practices for developing and including K-12 outreach-related activities as part of collections/digitization projects. Workshop participants will continue to work on the document collaboratively after the workshop, and solicit input on the document from a diverse group of teachers as part of a focus group. The final draft of the document will be published as a white paper and disseminated broadly.

(2) A plan of action by way of implementation of a collection-based pedagogy along with a set of identified assessment tools.

(3) A plan of action in the implementation of specimen-based learning tools and new technologies.

(4) We will present the results of this workshop at one or more national or international professional meetings to solicit feedback.

We will be sending out an outline for the white paper in the form of a Google document to start to gather information, important citations, examples, questions, and ideas before our workshop, so stay tuned!

Workshop Details

Dates: December 5-6 with travel days on December 4th and 7th 2016.

Location: Q?rius, The Coralyn W. Whitney Science Education Center at the Smithsonian National Museum of Natural History (<http://qrius.si.edu/>) Washington, D.C.

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