

Incorporating K-12 Outreach into Digitized Collections Programs Workshop Agenda

Agenda Summary: The morning of day one will consist of presentations and panel discussions introducing the use of Natural History collections in K-12 education. Topics will include an introduction to relevant science standards, teaching across the curriculum, the importance of assessment and evaluation, NSF reviewer suggestions for preparing compelling broader impacts statements involving K-12, and examples of successful K-12 projects utilizing Natural History Collections. The afternoon of day one and all of day two will be dedicated to working on a document that provides recommendations and best practices to collections personnel to incorporate K-12 outreach into their broader impacts statements.

To accomplish this, participants in the workshop will be broken into small groups to work on specific portions (chapters) of the document. We will regroup at the end of each day and provide progress reports from all of the breakouts. The afternoon of day two will be dedicated to the synthesis of the best practices document and the identification of next steps.

Breakout Groups: We will pre-assign roles and groups before the workshop. Each group will work on one “chapter” of the best practices paper. Each Breakout session we will define goals for what to discuss and write (sub-chapter topics). We will provide each group a Google Doc with a chapter outline.

Roles: Formal Education, Informal Education, Collections, Evaluation, Broadening Participation

Groups/Chapters:

- Chapter 1: Integrating digitized biodiversity collections into learning settings in school and out: needs, challenges, benefits, integrating standards
- Chapter 2: Learning from biological specimens and collections from preK to grade 12: Theory and practice (subtitle: Measure this, count those, draw that)
- Chapter 3: Online/Digital Resources: effective design and technology approaches
- Chapter 4: Lessons learned from successful outreach using biological collections in schools and outside
- Chapter 5: Broadening Participation
- Chapter 6: Evaluation and Assessment
- Chapter 7 Finding support for K-12 Outreach

Day One

| Time | Activity | Presenters |
|--------|--|--|
| 8:00am | Coffee, welcome, orientation to the workshop, workshop goals and products (Q?rius Theater) | Molly Phillips (Workshop orientation intro to iDigBio Amy Bolton (intro to Q?rius--really quick.) |
| 9:00am | Lightning introductions (one slide per person) (Q?rius Theater) | Everyone |

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| 9:15am | Insights from NSF into Broader Impacts involving K-12 (Q?rius Theater) | Marcia Mardis and Bruce MacFadden |
| 9:30am | Lightning talks from our Formal Education group on integrating collections into the classroom setting: needs, challenges, benefits, integrating standards (10 mins each) (Q?rius Theater) Moderator: Andrea Miller | Robert Hoffman Anne Basham Deb Linton |
| 10:00am | Panel Discussion with the Formal Ed group (Q?rius Theater) | |
| 10:15am | Lightning talks from our Informal Education group on engaging students in collections-based learning: needs, challenges, benefits, building relationships with educators (10 mins each) (Q?rius Theater) Moderator: Jillian Goodwin | Betty Duncel Austin Mast Colleen Popson |
| 10:45am | Panel Discussion with the Informal Ed group (Q?rius Theater) | |
| 11:00am | Lightning talks from our Online/Digital Resources: effective design and technology approaches Group (Q?rius Theater) Moderator: Jillian Goodwin | Ashley Naranjo Julie Evans Marcia Mardis |
| 11:30am | Panel Discussion with the Online/Digital Resources (Q?rius Theater) | |
| 11:45am | Examples of successful K-12 educational outreach programs lightning talks (10 minutes each) (Q?rius Theater) Moderator: Andrea Miller | Mark Cubeta Kari Harris Susan Butts |
| 12:15pm | Panel Discussion about successful collection-based k-12 programs (Q?rius Theater) | |
| 12:30pm | Lunch--catered (Q?rius Theater) | |
| 1:30pm | Presentation and discussion on broadening participation (Q?rius Theater) | Darrell Porcello Lisa White |
| 2:00pm | Presentation and discussion on evaluation/assessment (Q?rius Theater) | Shari Ellis |
| 2:20pm | Group assignments | |
| 2:30pm | Breakout Session #1 (Q? Studio, Lab and Theater) Note from Amy: the Lab is available for a breakout space starting at 2:00. | |
| 4:30pm | Wrap-up synthesis, talk about day two (Q?rius Theater) | |

Day Two

| Time | Activity |
|-------------|--|
| 8:00am | Coffee |
| 8:30am | Breakout Session # 2 (Q? Theater and Loft) |
| 11:30am | Group reports (Q?rius Theater) |
| 12:00am | Lunch |
| 1:00am | Breakout Session #3 (Q? Studio, Lab, Theater) Note from Amy: the Studio and Lab break out spaces are available starting at 2:00. |
| 3:00am | Group reports (Q?rius Theater) |
| 4:00am | Document synthesis and identifying next steps. (Q?rius Theater) |