

# 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

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) <b>Moderator:</b> 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) <b>Moderator:</b> 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) <b>Moderator:</b> 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) <b>Moderator:</b> 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)
12:00pm	Lunch
1:00pm	Breakout Session #3 (Q? Studio, Lab, Theater) Note from Amy: the Studio and Lab break out spaces are available starting at 2:00.
3:00pm	Group reports (Q?rius Theater)
4:00pm	Document synthesis and identifying next steps. (Q?rius Theater)