

# Staff Reactions to Life & Literature

# REPORT

Report Compiled By:

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# Executive Summary

On 14-15 November, 2011, BHL hosted the first Life and Literature Conference at the Field Museum in Chicago, IL. As part of the conference, attendees were asked to suggest development priorities for future BHL project maintenance, expansion, innovation, and avoidance in the areas of "Technical Advancement," "Content and Connections," "New Collaborations," and "Educational Outreach."

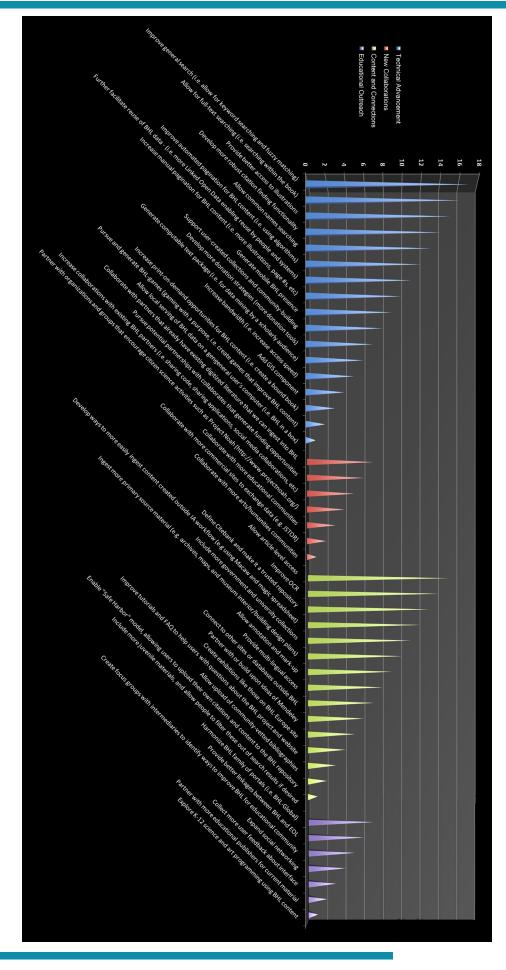
The BHL Executive Committee asked Staff to produce a report prioritizing Life and Literature conference attendee suggestions and providing any additional staff thoughts related to the conference.

To create this report, a Staff Reactions to Life and Literature Committee was formed. Committee members include: Michelle Abeln, Gilbert Borrego, Grace Costantino, Joe deVeer, J.J. Ford, Becky Morin, Matthew Person, Suzanne Pilsk, Trish Rose-Sandler, and Keri Thompson.

Using a survey created via the web application www.qualtrics.com, BHL staff ranked attendee suggestions, combined with any additional staff suggestions, for future BHL development. Results from the survey outline the following top priorities for each of the four indicated categories:

Technical	Content and	New	Educational
Advancement	Connections	Collaborations	Outreach
Improve General Search	Allow article-level access	Collaborate with part- ners that already have existing digitized litera- ture that we can ingest into BHL	Harmonize BHL family of portals

Following is a summary graph presenting staff prioritization of BHL future development in the areas of "Technical Advancement," "Content and Connections," "New Collaborations," and "Educational Outreach."



Staff Prioritization: BHL Future Development

# Background

On 14-15 November, 2011, BHL hosted the first Life and Literature Conference at the Field Museum in Chicago, IL. The express purpose of the conference was to generate conversations about the priorities for biodiversity literature digitization, particularly as it pertains to BHL, for the next 4-5 years.

The conference included four panel sessions ("Research, Informatics, and the Published Record;" "Publishers, Aggregators, and Authors - New Models and Access;" "Learning and Education;" and "Building Collaborative Networks for Science and the Humanities through Scientific Literature") followed by breakout sessions that allowed attendees to delve deeply into the themes discussed during the panels. Breakout Sessions were organized according to four categories: "Technical Advancement," "Content and Connections," "New Collaborations," and "Educational Outreach."

As part of the breakout sessions, attendees were asked to suggest development priorities for future BHL project maintenance, expansion, innovation, and avoidance. See "Appendix, Image A, page 10" for a summary of the suggestions provided by attendees in each category.

To help BHL executive staff appropriately integrate attendee ideas into strategic planning for BHL's future, the BHL Executive Committee asked Staff to prioritize breakout session suggestions, as well as provide any additional staff thoughts related to the conference, and present this information in the form of a Staff Reactions to Life and Literature Report.

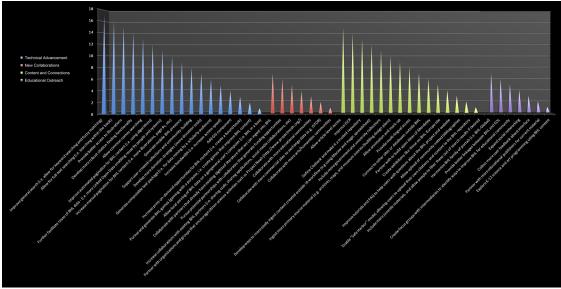
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# Survey

The Staff Reactions to Life and Literature Committee created a survey to allow BHL staff to prioritize the suggestions provided by conference attendees for BHL Maintenance, Expansion and Innovation in the categories of "Technical Advancement," "Content and Connections," "New Collaborations," and "Educational Outreach." The Committee also solicited further ideas from Staff via email and the BHL Staff Meeting (16 November, 2011). Attendee and staff suggestions were then combined to create a single list of priorities for BHL Staff to rank. See "Appendix, Table A, page 8" for final list.

The survey, created using the web application www.qualtrics.com, presented the categories and items on the list indicated above. A link to the survey was sent out to BHL staff, who were asked to rank the suggestions in each category according to their most to least important priority. A total of 24 responses were collected.

Below is a summary graph presenting staff priorities for BHL. See "Appendix, Images B-E, pages 11-14" for detailed survey results for each of the four categories investigated.



Staff Prioritization: BHL Future Development

### **Technical Development Discussion**

"Improve General Search" and "Allow for Full-Text Searching" were the top two contenders. Neither were ranked lowest by any respondents and more than half ranked these two items as either the first or second highest priority. At 2.25, "Improve General Search" has the lowest standard deviation, and at 2.79, "Allow for Full-Text Searching" has the fourth-lowest standard deviation.

"Pursue and Generate BHL Games" and "Allow Local Serving of BHL Data" were the second-lowest and lowest-ranked priorities, respectively, by BHL staff. No respondents ranked "BHL Games" higher than 8 and 20% ranked it the lowest priority. No respondents ranked "Local Serving" higher than 7 and nearly half ranked it the 15th (out of 17) lowest priority.

#### **New Collaborations Discussion**

"Collaborate with Partners that have Existing Digitized Literature" and "Pursue Partnerships with Collaborators that Generate Funding Opportunities" were the top two contenders. Neither were ranked lowest by any respondents. 60% of respondents ranked "Existing Digitized Literature" as the first or second highest priority and 70% ranked "Funding Opportunities" as the first, second, or third highest priority. "Existing Digitized Literature" has the lowest standard deviation (1.07) of all options, while "Funding Opportunities" has the fourth-lowest (1.46).

"Collaborate with Commercial Sites" and "Collaborate with Arts/Humanities Communitites" had the second-lowest and lowest scores, respectively. 40% of respondents respectively ranked "Commerical Sites" and "Arts/Humanities" the least-important priorities. This result is interesting, considering that many staff members voiced improving collaborations with the arts and humanities communities as a priority at the Staff Meeting, 16, Nov., 2011.

#### **Content and Connections Discussion**

"Allow Article-Level Access" and "Improve OCR" were the top two rated options. Neither were ranked as the lowest priority by any respondent. 70% of respondents ranked "Article-Level Access" as the first-third highest priority, while 60% ranked "Improve OCR" as the first-third highest priority. "Article-Level Access" has the lowest standard deviation (1.91), while "Improve OCR" has the second-lowest (2.39).

"Include More Juvenile Materials" was the lowest-rated option, with nearly 50% of respondents ranking it the lowest priority. It had the fifth-lowest standard deviation at 2.86.

#### **Educational Outreach Discussion**

"Harmonize the BHL Family of Portals" and "Provide Better Linkages between BHL and EOL" were the top two rated options. 60% of respondents ranked "Harmonize Portals" as the highest priority, while 60% ranked "Better Linkages" as the first-third highest priority. "Harmonize Portals" has the second-lowest standard deviation, at 1.50.

"Partner with Educational Publishers for Current Material" and "Explore K-12 Science and Art Programming using BHL Content" were the second-lowest and lowest-ranked priorities, respectively. 33% of respondents ranked "Educational Publishers" as the lowest priority, while 30% ranked "K-12 Science and Art" as the lowest priority.

# Additional Comments

At the BHL Staff Meeting, 16 November, 2011, staff had the opportunity to voice any additional thoughts about or reactions to the Life and Literature conference. These comments are listed below:

- ~ Conference attendees seemed most excited about visionary ideas presented at the conference for exploiting the art in BHL and reaching out to the art and humanities community. The Humanities panel was one of the most popular of the four, and the idea of increasing the uses of BHL images and incorporating art more firmly into the project came up in each of the break-out sessions.
- When expanding the BHL mission to the realm of education, we should view our goal as educating "citizens," encompassing everyone with a desire to learn. We should not limit our perspective to just children.
- ~ We should target collaborations with entities that provide funding opportunities.
- An important question to ask: "How do we avoid alienating our core group of users while expanding to new user bases?"
- ~ BHL should expand the scope of the project to reach new audiences but should also find ways to market existing content to new audiences.
- ~ BHL should develop new tools for accessing BHL content, providing new ways for users to use existing content.
- ~ BHL should explore the question: "What is our future relationship with EOL?"
- ~ BHL should incorporate keyword searching and partial title searching.

# Conclusion

The BHL Executive Committee asked Staff to produce a report prioritizing Life and Literature conference attendee ideas for future BHL development and providing any additional staff thoughts related to the conference. Suggestions for BHL future development were organized according to four themes: "Technical Advancement," "Content and Connections," "New Collaborations," and "Educational Outreach."

To create the report, a Staff Reactions to Life and Literature Committee was formed. Committee members include: Michelle Abeln, Gilbert Borrego, Grace Costantino, Joe deVeer, J.J. Ford, Becky Morin, Matthew Person, Suzanne Pilsk, Trish Rose-Sandler, and Keri Thompson.

Using a survey created via the web application www.qualtrics.com, BHL staff ranked attendee suggestions, combined with any additional staff suggestions, for future BHL development. Results from the survey outline the following top priorities for each of the four indicated categories:

Technical	Content and	New	Educational
Advancement	Connections	Collaborations	Outreach
Improve General Search	Allow article-level access	Collaborate with part- ners that already have existing digitized litera- ture that we can ingest into BHL	Harmonize BHL family of portals

General comments from staff also indicated a desire to investigate opportunities to collaborate with the arts and humanities community; pursue partnerships with a broad range of content providers, particularly those that might generate funding opportunities; develop strategies for reaching new audiences; and improve the user experience.

# Appendix

# Table A: Final List of Options (Ranked)

### **Technical Advancement**

- 1) Improve general search (i.e. allow for keyword searching and "fuzzy matching")
- 2) Allow for full-text searching (i.e. searching within the book)
- 3) Provide better access to illustrations
- 4) Develop more robust citation finding functionality
- 5) Allow common names searching
- 6) Improve automated pagination for BHL content (i.e. using algorithms)
- 7) Further facilitate reuse of BHL data (i.e. more Linked Open Data enabling reuse by people and systems)
- 8) Increase manual pagination for BHL content (i.e. more illustrations, page #s, etc)
- 9) Generate mobile BHL presence
- 10) Support user-created collections and community-building
- 11) Develop more donation strategies (more donation tools)
- 12) Generate computable text package (i.e. for data mining by a scholarly audience)
- 13) Increase bandwidth (i.e. increase access speed)
- 14) Add GIS component
- 15) Increase print-on-demand opportunities for BHL content (i.e. create a bound book)
- 16) Pursue and generate BHL-games (gaming with a purpose, i.e. create games that improve BHL content)
- 17) Allow local serving of BHL data on a general user's computer (i.e. BHL in a box)

Continued Next Page

### Table A Continued

### **New Collaborations**

- 1) Collaborate with partners that already have existing digitized literature that we can ingest into BHL
- 2) Pursue potential partnerships with collaborates that generate funding opportunities
- 3) Increase collaborations with existing BHL partners (i.e. sharing code, sharing applications, social media collaborations, etc)
- 4) Partner with organizations and groups that encourage citizen science activities such as Proj ect Noah (http://www.projectnoah.org/)
- 5) Collaborate with more educational communities
- 6) Collaborate with more commercial sites to exchange data (e.g. JSTOR)
- 7) Collaborate with more arts/humanities communities

### **Content and Connections**

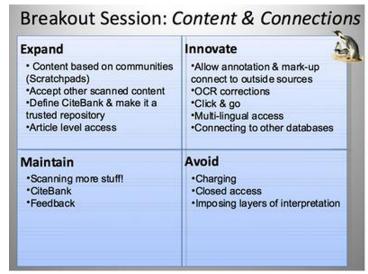
- 1) Allow article-level access
- 2) Improve OCR
- 3) Define Citebank and make it a trusted repository
- 4) Develop ways to more easily ingest content created outside IA workflow (e.g using Macaw and magic spreadsheet)
- 5) Include more government and university collections
- 6) Ingest more primary source materials (e.g. archives, maps, and museum interior/building design plans)
- 7) Allow annotation and mark-up
- 8) Provide multi-lingual access
- 9) Connect to other sites or databases outside BHL
- 10) Partner with or build upon ideas of Mendeley
- 11) Create exhibitions like those on BHL-Europe site
- 12) Improve tutorials and FAQ to help users with questions about the BHL project and website
- 13) Allow upload of community-vetted bibliographies
- 14) Enable "Safe Harbor" model, allowing users to upload their own citations and content to the BHL repository
- 15) Include more juvenile materials, and allow people to filter these out of search results if desired

### **Educational Outreach**

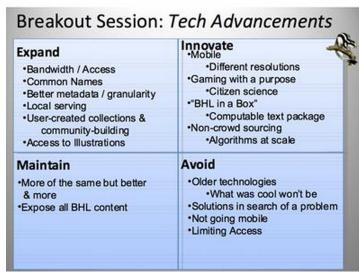
- 1) Harmonize BHL family of portals (i.e. BHL-Global)
- 2) Provide better linkages between BHL and EOL
- 3) Create focus groups with intermediaries to identify ways to improve BHL for educational community
- 4) Expand social networking
- 5) Collect more user feedback about interface
- 6) Partner with more educational publishers for current material
- 7) Explore K-12 science and art programming using BHL content

## Image A

### **Conference Attendees: Summary Breakout Sessions**







#### Breakout Session: Educational Outreach Innovate Expand Focus groups with intermediaries Add GIS component \*Expand BLE tool \*Tools / API development Social networking Access to game designers Explore science & art linkages Computable data \*Partnerships with publishers for current material Maintain Avoid Biodiversity Library Exhibitions ·Pay attention to brand ·Too big, too fast ·Harmonize BHL family of portals ·Bad metadata User feedback about interface Don't be valueless Better linkages between BHL &

## Image B

### **Technical Advancements: Detailed Survey Results**

#	Answer	1 -	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Responses
7	Improve general search (i.e. allow for keyword searching and "fuzzy matching")	10	5	2	4	1	0	0	0	0	0	1	0	0	0	0	0	0	23
8	Allow for full-text searching (i.e. searching within the book)	5	10	3	0	2	0	0	0	1	2	0	0	0	0	0	0	0	23
5	Develop more robust ditation finding functionality	2	0	1	5	2	3	1	3	5	0	0	1	0	0	0	0	0	23
10	Provide better access to illustrations	1	2	7	1	2	1	3	0	2	1	1	1	0	1	0	0	0	23
15	Increase manual pagination for BHL content (i.e. more illustrations, page #s, etc)	1	1	1	2	2	3	4	1	0	1	0	0	1	1	1	3	1	23
16	Allow common names searching	1	1	3	2	3	4	1	1	3	1	1	1	0	0	0	0	1	23
6	Develop more donation strategies (more donation tools)	1	0	0	0	1	2	1	2	1	2	0	4	2	4	0	2	1	23
2	Increase print-on-demand opportunities for BHL content (i.e. create a bound book)	1	0	0	0	0	1	1	0	0	1	1	2	1	3	3	5	4	23
17	Increase bandwidth (i.e. increase access speed)	1	0	0	0	1	2	2	2	1	1	2	2	1	1	0	1	6	23
14	Improve automated pagination for BHL content (i.e. using algorithms)	0	3	3	3	1	2	1	2	2	1	1	1	0	0	2	1	0	23
4	Generate mobile BHL presence	0	1	2	0	2	1	3	1	4	2	2	0	2	1	1	1	0	23
13	Allow local serving of BHL data on a general user's computer (i.e. BHL in a box)	0	0	0	0	0	0	1	1	0	0	0	2	3	2	9	4	1	23
9	Further facilitate reuse of BHL data - (i.e. more Linked Open Data enabling reuse by people and systems)	0	0	1	2	4	1	3	5	0	1	3	0	2	1	0	0	0	23
3	Pursue and generate BHL-games (gaming with a purpose, i.e. create games that improve BHL content)	0	0	0	0	0	0	0	1	0	4	1	2	4	4	0	2	5	23
1	Add GIS component	0	0	0	2	0	0	1	1	1	2	2	3	4	1	0	2	4	23
11	Support user-created collections and community-building	0	0	0	0	2	0	1	3	1	3	4	1	3	3	1	1	0	23
12	Generate computable text package (i.e. for data mining by a scholarly audience)	0	0	0	2	0	3	0	0	2	1	4	3	0	1	6	1	0	23
	Total	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	-

Statistic	Add GIS component	Increase print-on- demand opportunities for BHL content (i.e. create a bound book)	Pursue and generate BHL-games (gaming with a purpose, i.e. create games that improve BHL content)	Generate mobile BHL presence	Develop more robust citation finding functionality	Develop more donation strategies (more donation tools)	Improve general search (i.e. allow for keyword searching and "fuzzy matching")	Allow for full-text searching (i.e. searching within the book)	Further facilitate reuse of BHL data - (i.e. more Linked Open Data enabling reuse by people and systems)	Provide better access to illustrations	Support user- created collections and community- building	Generate computable text package (i.e. for data mining by a scholarly audience)	Allow local serving of BHL data on a general user's computer (i.e. BHL in a box)	Improve automated pagination for BHL content (i.e. using algorithms)	Increase manual pagination for BHL content (i.e. more illustrations, page #s, etc)	Allow common names searching	Increase bandwidth (i.e. increase access speed)
Min Value	4	1	8	2	1	1	1	1	3	1	5	4	7	2	1	1	1
Max Value	17	17	17	16	12	17	11	10	14	14	16	16	17	16	17	17	17
Mean	12.00	13.35	13.39	8.78	6.13	10.83	2.52	3.17	7.87	5.74	10.78	11.04	14.00	7.13	8.48	6.57	11.22
Variance	14.91	16.60	7.52	14.81	7.94	16.33	5.08	7.79	9.85	13.02	9.18	14.32	5.91	19.30	25.35	13.71	22.54
Standard Deviation	3.86	4.07	2.74	3.85	2.82	4.04	2.25	2.79	3.14	3.61	3.03	3.78	2.43	4.39	5.04	3.70	4.75
Total Responses	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23

- \* Improve General Searching: Ranked top priority by 10 people; second top priority by 5 people; lowest priority by 0 people
- \* Allow Full-Text Searching: Ranked top priority by 5 people; second top priority by 10 people; lowest priority by 0 people
- \* More Robust Citation Finding: Ranked top priority by 2 people; second top priority by 0 people; lowest priority by 0 people 
  \* Access to Illustrations: Ranked top priority by 1 person; second
- \* Access to Illustrations: Ranked top priority by 1 person; second top priority by 2 people; lowest priority by 0 people
- \* Increase Manual Pagination: Ranked top priority by 1 person; second top priority by 1 person; lowest priority by 1 person
- \* Common Names Searching: Ranked top priority by 1 person; ranked second top priority by 1 person; lowest priority by 1 person
- $^{*}$  Donation Strategies: Ranked top priority by 1 person; second top priority by 0 people; lowest priority by 1 person
- \* Print-on-Demand: Ranked top priority by 1 person; second top priority by 0 people; lowest priority by 4 people
- \* Increase Bandwidth: Ranked top priority by 1 person; second top priority by 0 people; lowest priority by 6 people

- \* Improve Automated Pagination: Ranked top priority by 0 people; second top priority by 3 people; lowest priority by 0 people
- $^{*}$  Mobile BHL Presence: Ranked top priority by 0 people; second top priority by 1 person; lowest priority by 0 people
- \* Local Serving of BHL Data: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 1 person \* Facilitate Reuse of BHL Data: Ranked top priority by 0 people;
- \* BHL-Games: Ranked top priority by 0 people; lowest priority by 0 people; by 0 people; second top priority by 0 people; second top priority by 0 people; lowest priority by 0 people; lowest priority by 5 people
- $^{*}$  GIS Component: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 4 people
- \* User-Created Collections & Community Building: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 0 people
- \* Computable Text Package: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 0 people

# Image C

### **New Collaborations: Detailed Survey Results**

#	Answer	1	2	3	4	5	6	7	Responses
1	Partner with organizations and groups that encourage citizen science activities such as Project Noah (http://www.projectnoah.org/)	7	1	3	2	4	4	2	23
2	Pursue potential partnerships with collaborates that generate funding opportunities	5	7	5	4	0	2	0	23
3	Collaborate with more educational communities	0	0	6	5	6	4	2	23
4	Increase collaborations with existing BHL partners (i.e. sharing code, sharing applications, social media collaborations, etc)	4	3	4	4	6	1	1	23
5	Collaborate with more commercial sites to exchange data (e.g. JSTOR)	0	3	1	1	4	5	9	23
6	Collaborate with more arts/humanities communities	0	0	1	3	3	7	9	23
7	Collaborate with partners that already have existing digitized literature that we can ingest into BHL	7	9	3	4	0	0	0	23
	Total	23	23	23	23	23	23	23	-

Statistic	Partner with organizations and groups that encourage citizen science activities such as Project Noah (http://www.projectnoah.org/)	Pursue potential partnerships with collaborates that generate funding opportunities	Collaborate with more educational communities	Increase collaborations with existing BHL partners (i.e. sharing code, sharing applications, social media collaborations, etc)	Collaborate with more commercial sites to exchange data (e.g. JSTOR)	Collaborate with more arts/humanities communities	Collaborate with partners that already have existing digitized literature that we can ingest into BHL
Min Value	1	1	3	1	2	3	1
Max Value	7	6	7	7	7	7	4
Mean	3.65	2.70	4.61	3.52	5.48	5.87	2.17
Variance	4.78	2.13	1.70	2.99	3.08	1.48	1.15
Standard Deviation	2.19	1.46	1.31	1.73	1.75	1.22	1.07
Total Responses	23	23	23	23	23	23	23

<sup>\*</sup> Partner with Groups that Encourage Citizen Science Activities: Ranked top priority by 7 people; ranked second top priority by 1 person; ranked lowest priority by 2 people

<sup>\*</sup> Collaborators with Funding Opportunities: Ranked top priority by 5 people; second top priority by 7 people; lowest priority by 0 people

<sup>\*</sup> Collaborate with Educational Communities: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 2 people

<sup>\*</sup> Increase Collaborations with BHL Partners: Ranked top priority by 4 people; ranked second top priority by 3 people; lowest priority by 1 person

<sup>\*</sup> Collaborate with Commercial Sites: Ranked top priority by 0 people; second top priority by 3 people; lowest priority by 9 people

<sup>\*</sup> Collaborate with Arts/Humanities Communities: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 9 people

<sup>\*</sup> Collaborate with Partners with Existing Digitized Literature: Ranked top priority by 7 people; second top priority by 9 people; lowest priority by 0 people

## Image D

### **Content and Connections: Detailed Survey Results**

#	Answer	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Responses
1	Define Citebank and make it a trusted repository	4	3	3	1	3	1	2	1	2	0	1	0	0	1	1	23
2	Include more government and university collections	0	2	3	1	1	5	5	1	2	1	1	1	0	0	0	23
3	Ingest more primary source material (e.g. archives, maps, and museum interior/building design plans)	1	1	2	3	1	3	1	5	1	2	1	0	1	0	1	23
4	Allow article-level access	5	9	3	1	2	2	0	1	0	0	0	0	0	0	0	23
5	Allow annotation and mark-up	1	1	3	0	2	3	2	2	5	1	1	1	0	1	0	23
6	Improve OCR	7	3	4	3	2	1	1	1	1	0	0	0	0	0	0	23
7	Include more juvenile materials, and allow people to filter these out of search results if desired	0	0	0	1	0	0	0	0	1	3	2	3	0	2	11	23
8	Provide multi-lingual access	1	0	0	3	2	3	3	0	0	2	5	0	1	2	1	23
9	Connect to other sites or databases outside BHL	0	0	0	1	3	1	1	2	3	3	5	3	0	1	0	23
10	Partner with or build upon ideas of Mendeley	0	0	0	2	0	3	2	2	2	4	3	2	2	0	1	23
11	Create exhibitions like those on BHL-Europe site	0	0	1	2	0	0	3	4	2	2	2	4	1	1	1	23
12	Allow upload of community-vetted bibliographies	0	0	0	2	1	0	0	2	1	0	0	7	7	3	0	23
13	Enable "Safe Harbor" model, allowing users to upload their own citations and content to the BHL repository	0	0	0	1	1	1	1	0	1	2	1	1	8	6	0	23
14	Develop ways to more easily ingest content created outside IA workflow (e.g using Macaw and magic spreadsheet)	4	4	3	1	4	0	0	0	1	1	0	0	2	1	2	23
15	Improve tutorials and FAQ to help users with questions about the BHL project and website	0	0	1	1	1	0	2	2	1	2	1	1	1	5	5	23
	Total	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	-

Statistic	Define Citebank and make it a trusted repository	Include more government and university collections	Ingest more primary source material (e.g. archives, maps, and museum interior/building design plans)	Allow article- level access	Allow annotation and mark- up	Improve OCR	Include more juvenile materials, and allow people to filter these out of search results if desired	Provide multi- lingual access	Connect to other sites or databases outside BHL	Partner with or build upon ideas of Mendeley	Create exhibitions like those on BHL- Europe site	Allow upload of community- vetted bibliographies	Enable "Safe Harbor" model, allowing users to upload their own citations and content to the BHL repository	Develop ways to more easily ingest content created outside IA workflow (e.g using Macaw and magic spreadsheet)	Improve tutorials and FAQ to help users with questions about the BHL project and website
Min Value	1	2	1	1	1	1	4	1	4	4	3	4	4	1	3
Max Value	15	12	15	8	14	9	15	15	14	15	15	14	14	15	15
Mean	5.39	6.35	6.91	2.87	7.04	3.35	12.78	8.39	9.13	9.22	9.30	11.09	11.39	5.83	10.96
Variance	16.70	7.51	12.26	3.66	10.95	5.69	8.18	14.79	7.39	8.54	10.13	9.90	9.79	24.88	15.23
Standard Deviation	4.09	2.74	3.50	1.91	3.31	2.39	2.86	3.85	2.72	2.92	3.18	3.15	3.13	4.99	3.90
Total Responses	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23

- \* Define Citebank: Ranked top priority by 4 people; second top priority by 3 people; lowest priority by 1 person
- \* Government & University Publications: Ranked top priority by 0 people; second top priority by 2 people; lowest priority by 0 people
- \* Primary Source Material: Ranked top priority by 1 person; second top priority by 1 person; lowest priority by 1 person
- \* Article-Level Access: Ranked top priority by 5 people; second top priority by 9 people; lowest priority by 0 people
- \* Annotation & Mark-Up: Ranked top priority by 1 person; second top priority by 1 person; lowest priority by 0 people
- \* Improve OCR: Ranked top priority by 7 people; second top priority by 3 people; lowest priority by 0 people
- \* Juvenile Materials: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 11 people
- $^{*}$  Multi-Lingual Access: Ranked top priority by 1 person; second top priority by 0 people; lowest priority by 1 person

- \* Connect to Sites Outside BHL: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 0 people
- \* Partner with Mendeley: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 1 person
- \* Create Exhibitions: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 1 person
- \* Allow Upload of Bibliographies: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 0 people
- \* Enable "Safe Harbor" Model: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 0 people \* Ingest Content Outside IA Workflow: Ranked top priority by
- \* Ingest Content Outside IA Workflow: Ranked top priority by 4 people; second top priority by 4 people; lowest priority by 2 people
- \* Improve Tutorials & FAQ: Ranked top priority by 0 people; second top priority by 0 people; lowest priority by 5 people

## Image E

### **Educational Outreach: Detailed Survey Results**

#	Answer	1	2 🔺	3	4	5	6	7	Responses
4	Harmonize BHL family of portals (i.e. BHL-Global)	7	9	1	3	2	1	0	23
2	Provide better linkages between BHL and EOL	6	4	5	2	2	3	1	23
7	Partner with more educational publishers for current material	1	4	0	3	4	3	8	23
6	Explore K-12 science and art programming using BHL content	1	2	1	1	4	7	7	23
5	Expand social networking	1	2	7	4	3	5	1	23
3	Collect more user feedback about interface	0	2	5	5	7	2	2	23
1	Create focus groups with intermediaries to identify ways to improve BHL for educational community	7	0	4	5	1	2	4	23
	Total	23	23	23	23	23	23	23	-

Statistic	Create focus groups with intermediaries to identify ways to improve BHL for educational community	Provide better linkages between BHL and EOL	Collect more user feedback about interface	Harmonize BHL family of portals (i.e. BHL-Global)	Expand social networking	Explore K-12 science and art programming using BHL content	Partner with more educational publishers for current material
Min Value	1	1	2	1	1	1	1
Max Value	7	7	7	6	7	7	7
Mean	3.65	3.13	4.35	2.43	4.09	5.35	5.00
Variance	4.96	3.66	1.96	2.26	2.54	3.24	4.09
Standard Deviation	2.23	1.91	1.40	1.50	1.59	1.80	2.02
Total Responses	23	23	23	23	23	23	23

<sup>\*</sup> Harmonize BHL Family of Portals: Ranked top priority by 7 people; second top priority by 9 people; lowest priority by 0 people \* Better Linkages between BHL & EOL: Ranked top priority by 6 people; second top priority by 4 people; lowest priority by 1 person

<sup>\*</sup> Partner with Educational Publishers: Ranked top priority by 1 person; second top priority by 4 people; lowest priority by 8 people \* K-12 Science and Art Programming: Ranked top priority by 1 person; second top priority by 2 people; lowest priority by 7 people

 $<sup>^{*}</sup>$  Expand Social Networking: Ranked top priority by 1 person; second top priority by 2 people; lowest priority by 1 person

<sup>\*</sup> Collect More User Feedback about Interface: Ranked top priority by 0 people; second top priority by 2 people; lowest priority by 2 people

\* Create Focus Groups: Papeled top priority by 7 people; second

<sup>\*</sup> Create Focus Groups: Ranked top priority by 7 people; second top priority by 0 people; lowest priority by 4 people