Assessment of Biomedical and Science e-Science Learner and User Needs to Develop an e-Science Web Portal and Support Library and Institutional e-Science Initiatives and Collaborations

Andrew Creamer, M.Ed. MLS ‘10, Myrna Morales, MAT MLSIS ‘10, Javier Crespo, MLS, Donna Kafel, RN, MLSIS, Elaine Martin, DA

INTRODUCTION

The Lamar Seutter Library of the University of Massachusetts Medical School and the New England Regional Medical Library have been awarded funding for the development of an interactive e-Science web portal that will integrate e-Science resources, content development and instructional tools, and a social networking and discussion forum for librarians. As part of the development of this portal initiative, we sent out 168 surveys to biomedical and science librarians in New England for input that will help us focus and align the portal with e-Science user needs and web 2.0 preferences, and get an idea of how many biomedical and science libraries and librarians are currently participating in e-Science endeavors.

E-Science Portal Needs Assessment Survey Recipients

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>General e-science distribution list</td>
<td>66</td>
</tr>
<tr>
<td>BLC Directors</td>
<td>19</td>
</tr>
<tr>
<td>Directors of New England Regional Libraries</td>
<td>16</td>
</tr>
<tr>
<td>Selected members of BLC biology listserv</td>
<td>11</td>
</tr>
<tr>
<td>Selected members of BLC chemistry listserv</td>
<td>13</td>
</tr>
<tr>
<td>Selected NER members</td>
<td>63</td>
</tr>
<tr>
<td>Surveys returned</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>168</td>
</tr>
</tbody>
</table>

METHODS

- The investigating team received feedback from an e-Science Symposium and workshop.
- The small investigating team researched and developed questions.
- The small investigating team then surveyed a group of medical librarians using SurveyMonkey.
- A small group of medical librarians then tested the survey.
- Based on the feedback, the survey was revised.
- The survey was then administered to science and medical librarians. After three weeks, the responses were collected and analyzed.

RESULTS

Do you provide E-Science related library services?

- No: 21%
- Yes: 67%
- Don’t Know: 12%

Research Question: What are the biomedical and science librarian e-Science web portal user needs and web 2.0 preferences in order to support the development and strengthening of libraries’ e-Science initiatives and collaborations?

What kind of online collaborative tools are you most comfortable using?

- Blog: 100%
- Wiki: 80%
- Email listserv: 60%
- Social Networking Applications: 40%

To support e-Science initiatives in your institution, what educational materials or opportunities are needed?

- Online tutorials for e-Science tools: 100%
- Online tutorials for e-Science Content: 80%
- Continuing Education: 60%
- Library Community Support: 40%

DISCUSSION

Preliminary results reveal a small yet significant number of diverse biomedical and science libraries actively engaged or actively pursuing e-Science collaborations within and outside of their institutions and a large number interested in such collaborations and endeavors. These results indicate librarians have urgent needs for online scientific content, especially informatics related, data tools’ tutorials and support, web 2.0 tools to facilitate the exchange of e-Science knowledge and experience among colleagues, and e-Science-related continuing education and professional development. In addition and important to note, the results indicate a significant need for and lack of awareness of online e-Science resources.

CONCLUSION

Biomedical and science librarians need an interactive e-Science web portal that integrates e-Science web resources and web 2.0 instructional tools and a forum for librarians.

Additional areas for further research include identifying and examining the specific types of e-Science collaborations and endeavors among biomedical and scientific institutions and their libraries and librarians, and studying the future effectiveness and/or impact of the web portal and its resources and web 2.0 tools on these collaborations and endeavors.

This project has been funded by the National Library of Medicine, National Institutes of Health, Department of Health and Human Services, under Contract No. NO1-MA-4-3508 with the University of Massachusetts Medical School.