An Overview on Digital Libraries

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ABSTRACT: With a goal of improving the development and delivery of effective online information literacy resources, the purpose of this study was to look at how program level and the timing of the introduction of a Literature Review library guide within the program influenced online business student perceived value of the resource. A population of undergraduate business students. And online MBA students. Were introduced to a Literature Review library guide during specific points in their programs. Students were asked to complete an online survey that included 17 closed-ended items designed to measure perceived usefulness, satisfaction and likeliness to use the guide again. The survey also included two open-ended questions asking students to discuss those elements of the guide they found most valuable and whether they wanted any additional features included in the guide. The data collection strategy required faculty post information about the Literature Review library guide and the survey in their courses at two specified times in the course.

KEYWORDS: Business Students, Digital Library Services, Distance Learning, Libguides, Student Perceptions.

1. INTRODUCTION

The traditional role of a library has been to provide crucial resources and services for student needs beyond providing books and serials. While web-based content and electronic media are available at students' fingertips, the web-based content may not provide the support that students need to complete their programs. Students struggle to find scholarly resources to support their academic work [1]. For online students, these struggles can become overwhelming. Many students fall into search habits that may assist them in completing an assignment, but will not build not all libraries offer for credit courses or provide embedded librarians to support the curriculum. Academic libraries have been exploring new ways to include library instruction that engages students during their times of need. By building course materials that support the learning process and providing information literacy instruction in the learning management system (LMS), students should have a better experience using the library resources, be more likely to find the appropriate library content, and build information literacy skills necessary for lifelong learning. Librarians will be better able to strategically build content that supports the online learner if they understand students' perceptions of the resources.

1.1 Using Guides:

Research around the utilization of library guides has identified that when library guides are used, these guides do improve research skills, GPA and retention. However, most utilization studies have focused on how the library guides are built and embedded, and not on how student perception of the guide may relate to student decisions to use the resources. Previous research also has not examined how student perceptions might be influenced by when an online library resource is introduced within a course or program[2].

1.2 Timing:

An important piece of planning for library research skills instruction is the timing of the instruction. Many studies have looked at the benefits of offering instruction at the student's' point of need. Rempel. Conducted a longitudinal study of graduate students who attended a literature review workshop presented by the library. The workshop was offered to students when they were new to their program, and the students found the workshop was an effective use of time. It is also important to consider programmatic requirements when determining the point of need. For example, Rempel. And Neves and Dooley. Point out those students who are required to submit a project proposal benefit from library instruction at an earlier time than those who do not have this requirement [3]. Additionally, students who had to come up with a topic tended to start their literature review almost a full year after starting their graduate research. Those students would probably benefit from library instruction at a later time. Mahaffey.concluded that students valued having a research guide when they needed the resource.

1.3 Perception:

Most of the perception research on online library guides revolves around the perceptions between print versus electronic resources. Other perception research has been completed on the adequacy of the library resources for both ground and online [4]. Student and faculty perception data can be helpful in assessing library instruction,

materials or to re-evaluate services. However, additional information about student satisfaction with the timing of the introduction of the library resources may also support informed decisions about information literacy instruction in the online environment[3].

1.4 Limitations with Response:

A few issues impacted student response patterns. The researchers developed the text for the faculty course announcements about the Literature Review library guide and the associated student survey, as well as instructions for faculty with regards to how and when to share the information with their classes [5]. However, the researchers had to rely on department administrators to share this information with faculty and for faculty to post the announcements in their classes on schedule. A review of class websites indicated many of the faculty did not post one or both of the announcements while there were 1190 students enrolled in these courses, only 684 received at least one notice about the Literature Review library guide, and only 226 students received both scheduled notices. The overall response across courses and including students enrolled in courses where at least one notice was posted was only was[6].

1.5 Timing and Literature Review Library Guide:

This study was designed to examine whether the timing of introduction of the Literature Review library guide into the academic programs was related to students' reported use of the guide and their satisfaction with the guide. Timing was considered in relation to courses. And that they were satisfied with their experience [7]. Because the response set was so small and because there was only one undergraduate response from the later course, it should be noted that late. Respondents were nearly all graduate students. The conflation of graduate student level with the. Course response should be considered when looking at the comparison of early students and late students on the specific usability and content items in this study[8].

1.6 Digital library research:

In order to answer: To what extent can we find evidence? That projects in Digital Library Initiatives are connected in some way to digital library practice?, we visited all of the available Web sites of projects Incas to the literature, the papers in Harem & Twidale.described and, to some extent, evaluated DLI 1 projects; some of the discussions in the compendium have relevance to the question raised here. Otherwise, we could not find in the literature any other assessment or evaluation of. Projects or of as a research program, for possible use in relation to questions raised in this study, aside the paper by Levy already mentioned.

1.7 Digital Library Initiative:

DLI 1 included six institutions, funded from.as listed by the National Science Foundation. It would be more advantageous to have the benefit of detachment provided by time and distance from the projects. Instead, looking at current projects through the lens of their sites provides immediacy yet makes it hard to discern what was actually accomplished. The results can be only surmised. Four. Projects are continuing into projects. And their sites incorporate both projects with minimal, if any, differentiation. These are practical demonstrations. About 40 publications are listed in two Progress Reports. Some are about digital libraries in general; some about user studies, and others are related mostly to computer images and vision[1].

1.8 Digital Library Initiative:

Underfunded Projects. The NSF site lists projects comprising 28 main projects, eight projects with undergraduate emphasis, 11 international projects, 14 in the Special Projects Program, and 16 in the Special Projects in Information Technology Research Program. These are funded for the period 1999 to 2006, however, some are targeted for shorter periods or different start years. The amounts for all projects range from. For this analysis, we concentrated on the 28 main projects only. We did not include study of other than the 28 major projects, basically because their emphasis is less on digital libraries, and more on some other aspect, such as education. Of the. Can be classified as domain-oriented, and 10 as general technologies. This is a significant shift from DLI 1 projects, where only were domain-oriented. Of the PIs, were from computer science departments, and the rest from a range of other department's ó languages, classics, philosophy, sociology, geography, geology, history, and biomedicine. This is also a significant difference from, where 83% of PIs were from computer science departments. Still, from the list of all the investigators in addition to PIs, a large majority is from computer science. In general, is much more domain-oriented than, and the spread of disciplines involved is wider[9].

1.9 Operations:

In addition to the projects reviewed, there are numerous operational digital libraries offering access to electronic resources and a range of services. It is next to impossible to enumerate all the libraries and other organizations/institutions that have an operational, practical digital library actively serving their communities [10]. Many existing libraries have a Web presence as listed in Libel. As to the U.S., Libel lists close to, with a high number having a digital library incorporating digital resources, collections, and services of one sort or another [11]. By now, all larger academic and research libraries have an associated digital library, but the depths of their digital collections and services vary significantly. In sum, the connections between DLI research and practical libraries range from very minimal to none. But here is a note of caution: While we found only three connections and nothing more, this does not mean that there are no other connections; it means that we just could not find them[4].

1.10 Digital libraries in professional societies:

Numerous organizations outside of hybrid libraries have operating digital libraries related to collections in their own domain, represented by ACM Portal, incorporating the ACM Digital Library, and IEEE Explore, incorporating the. Library. Both provide access to their publications, including conference proceedings. We chose these two societal digital libraries because, among other materials, they include many articles about digital libraries that appeared over the years, and because the publications of these societies were the prime outlets for reporting from DLIs. A search in IEEE Explore for "digital libraries" retrieved 403 documents, and in the ACM Digital Library. Documents. Rous.described the background and design principles for the ACM Digital Library, while Durmiak.described IEEE Explore. Combined with the information in these articles and extensive examination of and searching in the respective sites, we concluded that their design and operations mirror a number of other operational digital libraries. As far as we can see, they have no visible connection to work, demos or testbeds in DLI projects. It is surprising that although members of these societies dominate DLI research, the efforts of these societies regarding their own digital libraries are independent of DLI advances[12].

1.11 Commercial products:

We did not intend to review this area, but could not help noticing while exploring the issues raised here that there is another world very much involved with digital libraries [13]. Many commercial vendors of library systems have moved toward developing and offering a variety of packages that deal with supporting development and maintenance of digital libraries. So, too, have non-profit service organizations such as OCLC and Crossruff. Web oriented companies are also entering the market. Their customers are libraries making an evolutionary transition from library automation to digital libraries. The customers are not only traditional libraries, but also other organizations, such as societies. These vendors offer, among others, digital management systems for libraries; integrated library systems that now include digital library components; access, search and delivery systems; digital content conversion services; license and rights management systems; security systems; navigation, discovery and interoperability systems; interfaces; and digital reference services in a variety of packages directly related to digital libraries. For instance, the company Ex LIBRIS a worldwide supplier of software solutions and related services for libraries and information centers," is offering Metallic, a standardized interface and portal, incorporating SFX, an interoperability system, for hybrid libraries and information systems.

1.12 D-Lib Magazine:

From its start in, D-Lib Magazine evolved into a primary vehicle for reporting on many facets of digital libraries. We analyzed. Papers that appeared in the main sections variously titled Articles.and.Project Briefings" from January 1999 to January 2002. We did not consider other materials in the Magazine - and there are plenty of these. As to the topics of the 153 papers, are on issues, on technology, 65 (42%) on projects, and nine on research. Of the 49 papers that reported on specific projects, are from the U.S.; the rest. Are projects in the European Union, the UK, Germany, Netherlands, Australia, and Canada? Some of the projects are on digital collections, others report on services, processes. Or technology. Of the. Specific projects, are on operating digital libraries either in a domain, or describing a digital library or service in an institution. The authors of three of the papers are LIS faculty; two are authored by researchers in government institutions; the rest of the papers are by authors from a computer science department, a consultant, and other organizations.

2. DISCUSSION

A Digital Library is a special library with a focused collection of digital objects that can include text, visual material, audio material, video material, stored as electronic media formats. Along with means for organizing, storing a definition of digital libraries is from Digital Library Federation [14]. Digital Libraries are organizations that provide the resources, including the specialized staff to select, structure, offer intellectual access to interpret, distribute preserve the integrity of and ensure works so that they are readily and A digital library is a library in which collections are stored in digital formats [15]. And accessible by computers. The content may be stored locally, or accessed remotely. Bush created a vision based on experience. Books are provided either by publishers and authors through the Google Books Partner Program, or by Google's library partners through the Library Project. The most extensive free online library is the Internet Archive. Boasting over three million texts and over a million. Of video and audio recordings, the Internet Archive offers a wealth of free information, including the largest repository of archived web pages, going back to 1996, through its Way Back Machine. Regarding quality dimensions, we consider: accessibility, accuracy, completeness, composability, conformance, consistency, effectiveness, efficiency, extensibility, pertinence, preservability, relevance, reliability, reusability, significance, similarity, and timeliness.

3. CONCLUSION

The study examined projects in digital library research and digital library practice in the U.S., with the aim of determining whether they inform each other, and whether there is a connection. We consulted information provided on the Web sites of a large number of digital library projects reporting research or practice, and a representative set of literature on the topic. In other words, we looked at what is visible and on the surface. The approach has obvious limitations - we took the information provided "as is;" and we did not pursue any deeper analysis of connections, if any, below the surface. We acknowledge, as enumerated in the section Methodology, significant limitations to the method. Thus, we also acknowledge that conclusions should be taken with that caveat in mind. In all of this, we do not criticize or evaluate either research or practice in general, or any undertaking or project in particular. We did not look at accomplishments, but only at possible visible connections. We did not discuss the. Factor, but it cannot be ignored. Millions of dollars are involved in both digital library research and digital library practice; the economic aspects are critical to both. Digital library research was driven by availability of massive funding. Digital library practice is flourishing because of massive direction of funds to development and operations. More often than not, contemporary choices in research topics and in technology transfer hinge on economics. In other words, economic factors and interests may be the deciding factor in possible connection, or lack thereof, between research and practice.

REFERENCES:

[1]   M. Seadle and E. Greifeneder, "Defining a digital library," *Libr. Hi Tech*, 2007, doi: 10.1108/07378830710754938.

[2]   H. I. Xie, "Users' evaluation of digital libraries (DLs): Their uses, their criteria, and their assessment," *Inf. Process. Manag.*, 2008, doi: 10.1016/j.ipm.2007.10.003.

[3]   I. Xie and J. Stevenson, "Social media application in digital libraries," *Online Inf. Rev.*, 2014, doi: 10.1108/OIR-11-2013-0261.

[4]   R. Valarmady, D. Pradeepa, D. Divya, and R. Saraswathy, "Digital libraries," *J. Chem. Pharm. Sci.*, 2016, doi: 10.1145/3385658.3385669.

[5]   M. Hallo, S. Luján-Mora, A. Maté, and J. Trujillo, "Current state of Linked Data in digital libraries," *J. Inf. Sci.*, 2016, doi: 10.1177/0165551515594729.

[6]   M. Tabassum, M. Roknuzzaman, and M. M. Islam, "Usage of a digital library system at a private university library in Bangladesh," *Ann. Libr. Inf. Stud.*, 2015.

[7]   D. Hull, S. R. Pettifer, and D. B. Kell, "Defrosting the digital library: Bibliographic tools for the next generation web," *PLoS Computational Biology*. 2008. doi: 10.1371/journal.pcbi.1000204.

[8]   A. Kumar, "Digital Library Architecture," *World Digit. Libr.*, 2008, doi: 10.3233/WDL-120027.

[9]   V. T. Kamble, H. Raj, and Sangeeta, "Open source library management and digital library software," *DESIDOC J. Libr. Inf. Technol.*, 2012, doi: 10.14429/djlit.32.5.2647.

[10]   M. A. Gonçalves, B. L. Moreira, E. A. Fox, and L. T. Watson, "'What is a good digital library?' - A quality model for digital libraries," *Inf. Process. Manag.*, 2007, doi: 10.1016/j.ipm.2006.11.010.

[11]   X. Liu, J. Bollen, M. L. Nelson, and H. Van De Sompel, "Co-authorship networks in the digital library research community," *Inf. Process. Manag.*, 2005, doi: 10.1016/j.ipm.2005.03.012.

[12]   S. R. Sharifabadi, "How digital libraries can support e-learning," *Electron. Libr.*, 2006, doi: 10.1108/02640470610671231.

[13]   J. Pomerantz and G. Marchionini, "The digital library as place," *J. Doc.*, 2007, doi: 10.1108/00220410710758995.

[14]   R. A. Audunson and N. Z. Shuva, "Digital Library Education in Europe: A Survey," *SAGE Open*, 2016, doi: 10.1177/2158244015622538.

[15]   J. Pomerantz, J. Abbas, and J. Mostafa, "Teaching digital library concepts using digital library applications," *Int. J. Digit. Libr.*, 2009, doi: 10.1007/s00799-008-0049-6.