All Agents of Instruction & Communication: The Intersections between Libraries, Archives and Museums via Social Media

Julia Gelfand
University of California, Irvine, USA

Anthony Lin
Irvine Valley College Library, USA

Abstract. Academic and Research Libraries have refreshed their mission in recent years. In the spirit of more global insights and inclusion, adopting and utilizing the emerging technologies available to them, libraries have focused on ways to promote information literacy, best practices in scholarly communications and make teaching and learning the object of their outreach. This paper will explore how academic and research libraries are implementing a range of social networking activities to augment their online presence through traditional websites and launch new ways for their users to conduct and meet their information needs. Libraries are also extending access with greater mobile optimized sites for Smartphones and other technologies that enhance information in utilizing and managing data, images, audio and streaming media.

Introduction

This paper reinforces the alignments and partnerships between libraries, archives, museums. In reality, all three of these institutions may be a bit threatened as they compete for resources from their organizational nexus. Usually they are not stand alone entities but instead dependent upon funding from government agencies, complex governing boards of multiple stakeholders, and broad user constituencies. The contemporary challenges facing these institutions point to a series of intersections that can inform future directions that will reinforce the value of each of these important cultural institutions and demonstrate how convergence stimulated by the potential for social networking and media will be conduits of the next generation of libraries, archives and museums. This conference addresses subthemes of how acquisitions and appraisal or the collection focus, space management, preservation and conservation practices and procedures, marketing and promotion, digitization, and disaster planning and management of libraries, archives and museums lends to the understanding of sharing common understandings and best practices that can identify synergies and promote interconnectedness.

Schools have teachers, libraries have librarians, archives have archivists, museums have curators and educators, and the frontlines of each of these organizations are engaged in satisfying information queries by fulfilling an instruction role. Museums may be more specialized than libraries, defined by scope and breadth. In each of these institutions,

there are clearly codes and practices that define how things are done and training for positions in each varies but in recent years one can see some convergence. Job descriptions may have different terminology and requirements, but functions appear to overlap. Museums may focus more on creativity and innovation while libraries tend to promote information usage. "The joy of discovery" is present in each environment however libraries may be more concerned with providing objectivity and teaching skills. In a recent report commissioned by Dell and Intel, two of the largest global IT producers, they found:

> The consumerization of information technology, defined as the migration of consumer technology and experiences into enterprise computing environments is a well-recognized phenomenon around the world. Across the globe, people are seeing the benefits of technology in enabling more flexible working, discovering new ways of accomplishing tasks and enhancing productivity.[1]

What we conclude in our observations and literature review is that the more developed the environment and location, the greater the expectations are by the user communities to have not only a physical presence for these institutions but to have take-away and perpetual access equally available. This report validated seven trends that we conclude will support and extend the collaborative work of libraries and museums in coming years:

1. Crowdsourcing – collaboration will dictate work environments
2. Productivity measured in outputs not by time – quality will prevail over quantity
3. Changes in the adoption of devices will dictate services and activities – employees will determine the choice of products and technology provided
4. Intergenerational kiss and punch – digital natives will soon predominate workforces
5. Values versus rules – employees believe that they are trusted by employers yet pervasive technologies allow for oversight and intrusive monitoring
6. IT management and leadership will have to try harder to keep and retain workforce with latest technology applications and devices
7. Employee led innovation will be critical for the next generation workforce and new freedoms will achieved with new business software and communication tools[2]

The 2002 release of the *Impact of Evaluation of Museums, Archives and Libraries: Available Evidence Report* produced by Robert Gordon University suggests evidence of impact for these institutions in four categories: -

- Social Impacts
- Learning Impacts
- Economic Impacts
- Access and Barriers[3]

Findings indicate that the most compelling evidence of impact was "found to be in the area of personal development…and can be expressed in terms such as:

- Source of enjoyment and personal satisfaction
- Acquisition of skills
- Trying new experiences
- Increased confidence and self-esteem
- Changed or challenged attitudes
- Developing creativity, cultural awareness, communication and memory
- Providing support for educational courses, job seeking and workplace skills"[4]

A decade later, we believe that many of these indicators are still valid and not surprisingly remain very important.

Social Communications

Communication prior to or following a library or museum visit can now be sustained in many different ways due to digital communication channels and linking to different elements of the experience. Today, most libraries and museums have detailed websites that are inviting and offer avenues of continuity to stay engaged, connected and informed. The cultural and social participation is predicated on the methods of communication utilized. Museum communication has its own predetermined structure, which we conclude can apply to libraries as well:

- One-to-One which translates into User-to-User
- One-to-Many which translates to Museum-to-User (illustrated by webpages or blogs)
- Many-to-Many which translates to Knowledge-to-Knowledge (wikis)[5]

Educational and Outreach Functions

The educational function usually described in academic libraries as information literacy or library instruction has a strong parallel role in museums. Since the archival and preservation mission is so central to museums as they emphasize education and social inclusion, and are so committed to a legacy of providing and reinforcing a sense of heritage, whether it is in reference to the national scope or one's individual and family history, there are learning functions and outcomes that are part of a common mission in both libraries and Hooper-Greenhill discusses five generic learning outcomes (GLOs) as they relate to culture as:

- an increase in knowledge and understanding
- a change in attitudes or values
- enjoyment, inspiration, creativity
- action, behaviour, progression[6]

Hooper-Greenhill advances her theories with this summary statement, "The cultural GLOs have been developed to accommodate and demonstrate the strengths of learning in cultural organisations; there is more emphasis on inspiration and creativity than is normally to be found in GLOs in the formal sector, and there is increased scope for identifying attitudinal and value change.[7]

The educational role of libraries has until recently been centered around two basic goals under the tenets of critical thinking, while broadly conceptualizing information as being not only bibliographic but reflective of data, images, and other literacies:

- How to develop information seeking skills
- How to evaluate information

In addition to information literacy, the academic community introduced other forms of literacy that have become central to student independence and success, measured by different outcomes and among the thirty listed[8] the ones most relevant to the focus of librarians concerned with instruction and resources include:

- Information literacy
- Digital literacy
- Financial literacy
- Visual literacy
- Data literacy
- Graphicacy
- Geographic literacy
- Cultural literacy
- Numeracy
- Scientific literacy
- Creative literacy

With academic libraries engaged in greater collaborations with public and school libraries, and the maturing of distance education, the virtual role of libraries is increasingly significant. Access to remote collections is of paramount priority to all library sectors, and with more digital content available and the diverse roles libraries play, this is an obvious direction libraries will be headed. The reference function performed in libraries combines the roles of docent, teacher, concierge, advisor, and guide Museum docents have long been a feature of the museum culture with independent training opportunities to drive the success of those educational outreach initiatives and that volunteer capacity is not common in even public libraries, much less academic libraries.

Museums for years have utilized tapes, headphones, scripts, and other immersive, interactive and emerging technologies to guide visitors through exhibits and engage in learning exercises. Libraries and Archives have adopted tutorials, instructional videos and finding aids customized to user needs to assist users in developing self-sufficiency and greater fluency in becoming efficient and effective library users. It is our assessment that we are

still at an early stage in some of these areas and can fully expect more integration among the technologies to promote a richer user experience and to reduce physical barriers such as being on the premises, opening hours, need to borrow resources, and the like. Cellular and smart phones, more ubiquity in social media will contribute to ongoing thrusts in this area, especially in promoting access and content.

Collections, Acquisitions and Processing

Libraries and museums subscribe to the same commitment of acquiring what is supported by the collection development policy, created and defined by the organization's mission. Practices will vary due to budgets, staffing, scope, local workflows and consortia practices. Museums do not usually provide access to holdings that are not part of either permanent or special exhibits, whereas libraries make nearly everything available. Metadata has become increasingly critical in processing for indexing, retrieval, and organization. The "pleasure element" may be hard to discern because museums contain more visual objects while the visual concept of images, illustration and text also are significant in library collections. The following workflow concepts are carried out in all organizations, however the extent to which they are practiced will vary:

- Selection & Acquisitions – own vs subscribe or rely upon by borrowing from partners
  - Role of gifts / donations
  - De-selection / weeding / selling
- Descriptive processing – cataloging & control, accessioning
- Resource sharing
- Lending practices
  - Intellectual property & rights management
- Cultural heritage
- Digitization and evolving formats

E-commerce

Many libraries have turned to e-commerce as another method of generating revenue. In many cases, libraries have marketed their most commonly known asset, print books, and have gone to sites such as E-bay, Half.com, and Amazon to sell used books to the general public and generate money from the sales of those books.[9] There are other sites such as LibraryBookSales.org or Better World Books that help libraries sell their books and give back money in form of cash or vendor credit to purchase more current materials or use the funds towards some other purpose.[10] In addition, this is an excellent opportunity to generate goodwill with the community as many libraries are hesitant to accept donations from users. With the book recycler or book seller in place, the library can accept any donations and shift the burden of selling used books to the book recycler and also generate profit from the sales of those books.

Access and Membership

Several years ago, libraries, museums, and archives were unchallenged as cultural institutions for research and learning. All three did not need to offer anything beyond their mission of serving as the center for educating their users about the collections. In the new millennium, libraries, museums, and archives are head-to-head with the private sector businesses that offer many conveniences and valued added services and commodities in addition to focusing on the customer experience to make their visit both entertaining/fun and educational/informative. Museums and Archives compete against movie theaters, amusement parks, zoos, and other cultural institutions and performance venues and places that provide entertainment, escape and enrichment. Libraries compete with bookstores and coffee shops that offer lattes, wireless internet, and a comfortable meeting place for socialization, entertainment for customers/readers. In order to stay competitive, all three cultural institutions need to keep in mind the total user experience that they provide.

Basic amenities and structure such as proximity to museum, the knowledge/background of the staff, parking facilities, interest in and educational value of collections, admission prices, membership options, accompanying services of museum like a café or restaurant, museum store, daycare provisions and ease of access for disabled and young children/toddlers when considering a visit to a particular museum vs. a zoo or amusement park are considerations that direct attendance decisions.[11] Although a visit to a museum is not supposed to be like going to

Disneyland, the experience of the museum patron does not diminish the fact that museums compete with other entertainment options when the public decides what to do in their free time.

Although libraries and archives, in general, do not charge admission for the services that they provide, they too must take into consideration the user experience for using the collections. Libraries must examine their collections both print and electronic, and consider the quality and hospitality of the facility (i.e. access to parking, hours of operation, comfort levels, reducing safety hazards, etc.), and assume that the user rates the library collection as satisfying their needs prior to visiting. Libraries are investing heavily in converting print content to digital formats and this is very clear in special collections units where access restrictions were the most severe. Today, those units demonstrate better access by creating finding aids and scanning documents so that remote access is now available and growing.

Increasingly, libraries are coming up against their private sector competitors such as Starbucks that offer many conveniences that libraries lack. Many bookstores have inside coffee shops such and allow their customers to browse their books for free before buying them. Not only do bookstores offer the convenience of read-before-you-buy access to books, but also combined with the amenities and conveniences of a Starbucks on top of that. Many libraries are now starting to add coffee shops and cafes in addition to cultural events and programs to enrich the user experience. Unfortunately, many libraries are still stuck in the mentality of library being a warehouse for print materials with arcane rules for food and beverages and little or no tolerance for conversation or public discourse.

Museums typically charge admission fees aligning themselves more as entertainment venues than as service providers. Fees can be grouped into three categories, membership driven, paid admission days and free admission days. Even though the museum may experience some loss on the free days, it gains in non-monetary means such as recognition for providing access to a cultural experience that was typically reserved for the elite and well-to-do.

Online Practices

In an ideal world, librarians want to provide the greatest access to materials with the least amount of restrictions. In the past, access and control of library materials was fairly simple, print materials could be loaned for a certain time period determined by libraries. Library users were clear on borrowing privileges and restrictions placed on non-circulating and circulating library materials.

In today's era of electronic databases, streaming video, and downloadable reports, the access boundaries and policies are complex. Librarians grapple with license agreements, terms of service, copyright clearance, and digital rights management (DRM). In addition, access to electronic resources contains a byzantine set of rules and regulations governing each individual database or publication. For example, electronic resources for business information are notorious for multiple "levels of access." Certain business databases require dedicated access via defined machines, individual registration by users, restricted access to specialized content others do not allow downloading, sharing, copying or printing. It can be perceived that the role of the librarian has expanded from information provider and instructor to traffic cop and lawyer by enforcing license agreements while trying to advocate for greater access at fair and affordable pricing.

If things are not already complicated with access rights, Digital Rights Management (DRM) takes the level of complexity to new heights in access management. DRM is the gatekeeper for electronic library information. It provides the following guidelines:
- a method for the publisher to protect their intellectual property
- the database vendor to discourage harvesting of information
- allows access to information to the end user without making the experience too cumbersome in the process.

Concerns for access per the Fair Use doctrine must be recognized and protected by both museums and libraries. The problem remains that each database vendor, ebook vendor, and publisher has a different system for access control. At this time, there is currently no current standardized system for DRM, causing confusion for providers and users alike. According to Eschenfelder there are two basic types of DRM available, soft restrictions and hard restrictions. [12] Soft restrictions attempt to "discourage certain uses such as saving, printing…" [13] Some examples of this are in many e-book packages that set page limits, download limits, or any limitations that would make it difficult for the user from downloading the entire book, article, or document. Hard restrictions strictly prohibit saving, printing, or emailing.

TABLE 1
A User View of Use Restrictions

Soft Restrictions	Interface or server side configurations of software or hardware that may discourage certain uses such as saving, printing multiple pages, e-mailing. Importantly, the desired use may be achieved through workarounds such as multiple sessions, or operating system or browser functionalities. These workarounds may not be obvious, and they may involve inconvenience to the user.
Hard Restrictions	Systems that strictly prevent uses such as saving, printing, or e-mailing despite operating system or browser functionalities.

The table below outlines the different types of soft vs. hard restrictions.

TABLE 2
Summary of Use Restriction Types and Examples from the Data

	Definition	Restriction Subtype	Observed Use Restrictions
Soft Restrictions	Interface or server side configuration of hardware and software that may discourage certain uses such as saving, printing multiple pages, e-mailing. Importantly, desired use may be achieved via operating system or browser functionalities; however, it may be inconvenient.	**Extent of use**	Page print limits, PDF download limits; data export limits; suspicious use tracking.
		Obfuscation	Needing to select items before use options become available.
		Omission	Not providing buttons or links to enact uses.
		Decomposition	Saving document results in many files, making recreating or e-mailing the document difficult.
		Frustration	Page chunking in e-books.
		Warning	Copyright warnings, end-user licenses on startup.
Hard Restrictions	Combinations of hardware and software that strictly control or disallow direct or subsequent use actions including saving, printing, or e-mailing despite operating system or browser functionalities.	**Restricted copy and paste OCR**	OCR exposed for searching, but not for copying and pasting of text.
		Secure container TPM	Use rights vary by resource.

One possible scenario in the future is that one dominant player in the market will determine the DRM standard.[14] For example, Apple has dominated the music market through the popularity of the i-devices (iPhone, iPad, iPod, etc)

and also through iTunes. In much the same way, Amazon's Kindle, Apple's iPad, and Barnes and Noble Nook could eventually determine the DRM standard for e-books.

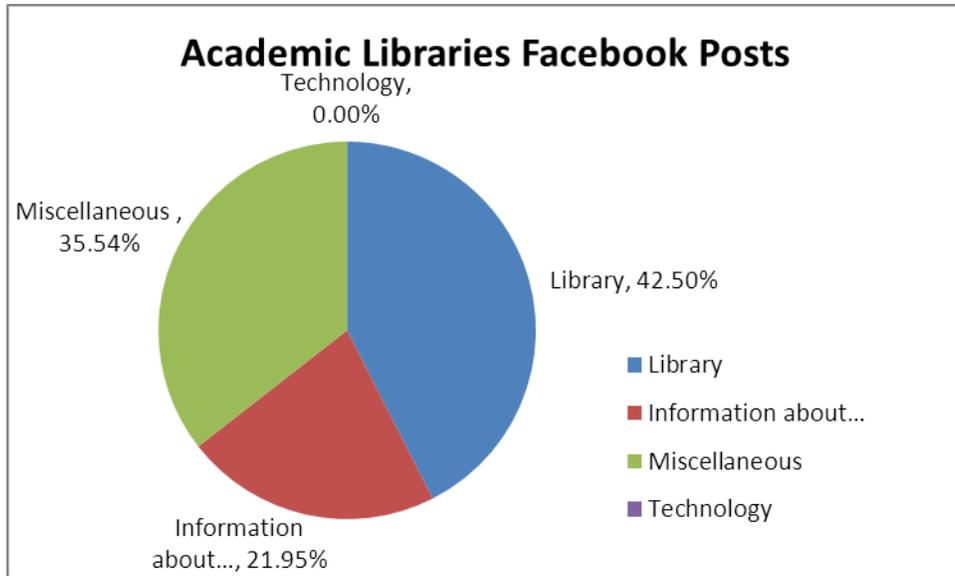## Promotion and Publicity through Social Media

Social media has changed the ways that libraries and museums have promoted themselves. The advent of Facebook, LinkedIn, and other social networking sites have given libraries a new way of promoting their services and pushing their events to users that could benefit from them.

Libraries represent the "provider" side of social media marketing by providing their events, classes, and services through library promotion. Library users represent the "consumer" side by taking in the library promotions and services and responding to the Facebook postings. Jacobson examined the perceived vs. actual use of Facebook in libraries that represents the "provider" side by examining the actual Facebook contents of library pages. Her findings are partly based on an earlier study done by Hendrix et al. in terms of how libraries actually use Facebook.[15]
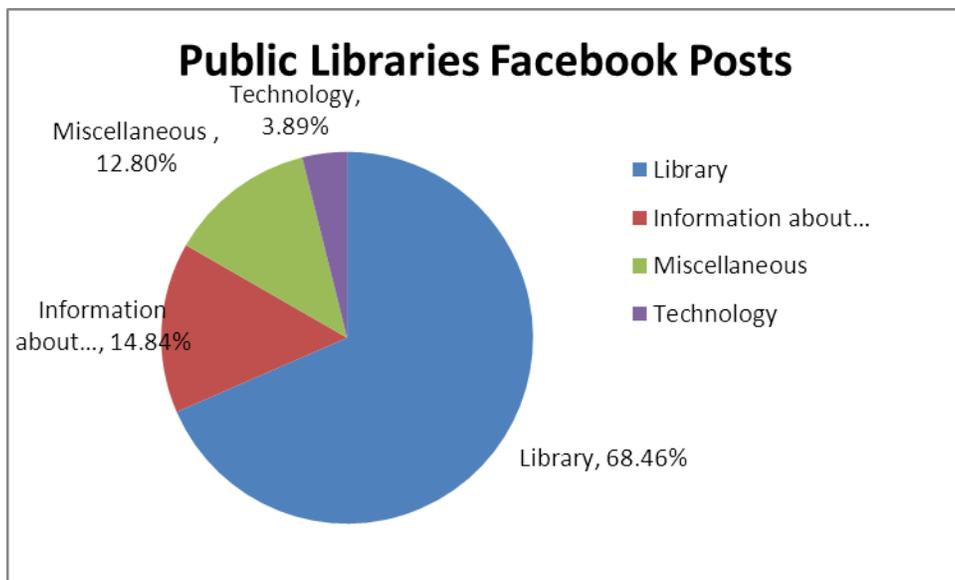
FIGURE 1
Comparison in Raking between Hendrix et al. (2009) and Actual Facebook Contents

Hendrix et al. (2009) Survey	Actual Facebook Contents
1. Announcements/Marketing	1. Announcements/Marketing (-)
1. Photos	1. OPAC Search (↑)
1. To be where users are	2. RSVP to events (↑)
2. Reference services	3. Photos (↓)
3. Forum for Users	3. To be where users are (↓)
4. RSVP to events	4. Reference Services (↓)
4. OPAC search	4. Forum for Users (↓)
4. Database Search	5. Database Search (↓)
5. Employee Announcements	5. Video (↑)
5. Employee Communication	
No Use	**No Use**
Administer a course	Administer a course (-)
Tutorials	Tutorials (-)
Post Audio	Post Audio (-)
Video	Employee Communication (↓)
Podcasts	Employee Announcements (↓)

Note. Each tier can contain more than one use. There is no limit to how many uses may fall into a specific tier classification. (-) = No change in rank; (↓) = decrease in rank; (↑) = increase in rank.

In contrast, a study by Aharony represents the "consumer" side by examining how users interacted with library Facebook pages in the academic and public library environment.[16] In both environments the research showed that academic library Facebook posts, not surprisingly, tended to focus on content about the library itself (library activities, library services, library general situation, and library collection). The second largest category for academic libraries is in the miscellaneous category that included items such as congratulations, acknowledgements and similar items. Finally, the third largest category for academic library Facebook posts focused on "Information about" that were mainly things like academic events, general events, and campus events. The public libraries had a fourth category that focused on posts about technological issues that was noticeably absent from the Academic Libraries.

It is interesting to note from Jacobson that libraries primarily use Facebook for Announcements/Marketing and the data from Ahrony's study support that users typically respond to "library" Facebook postings about library events and other library announcements.[17] Although it is probable that not all of the "library" category postings were about library marketing campaigns, this was the largest category for Facebook posts for both academic and public libraries.

Academic Libraries Facebook Posts

Technology, 0.00%
Miscellaneous , 35.54%
Library, 42.50%
Information about…, 21.95%

- Library
- Information about…
- Miscellaneous
- Technology

Source: Ahrony, 2012

Public Libraries Facebook Posts

Miscellaneous , 12.80%
Technology, 3.89%
Information about…, 14.84%
Library, 68.46%

- Library
- Information about…
- Miscellaneous
- Technology

Source: Ahrony, 2012

Museums are also using social media for marketing purposes as well. In the UK, museums started a "Follow a Museum Day" on Twitter that encouraged museum patrons to follow the Twitter feed for museums posting events and exhibitions.[18] In short, based on recent studies, both libraries and museums can both benefit from greater use of social media to reach out to more users and market their services.

Library/Museum as Publisher

Today, academic libraries are coming to the forefront of the publishing empire as they challenge whether they need to "buy back" scholarship that was generated on their campuses. By educating scholars about authors' rights, copyright and other forms of intellectual property, the scholarly communication movement is now robust and offering opportunities for knowledge generation, new models of information sharing and the establishment of significant disciplinary and maturing institutional repositories. As libraries digitize more of their collections, especially in Special Collections and Archives, the model of library publishing becomes more vital.

Museums have a long and distinguished history of publishing exhibition catalogs and finding aids. In addition, the merchandising element of museums with sophisticated shops that sell reminders that promote exhibit content in perpetuity and other assorted goods and products, is not only a revenue generating opportunity for museums, but places them in a creative and entrepreneurial business role. Increasingly, the museum shops have an online presence and shoppers can peruse and purchase items having them packaged and mailed from afar. Curators contribute original content to brochures and guides, librarians engage similarly with creating research pathfinders, course guides, and contribute content to shared databases. These areas will predictably expand in the near future in each institution directing remote users to have access to not only exhibit content, but to important resources.

Funding Issues – Funding Sources

In recent times, academic institutions and museums have experienced widespread budget cuts that affect the budget. Libraries in particular have been hard hit and have been scrambling to find other sources of funding to make up for the lost revenue. "An article in the May 2009 issue of *American Libraries* outlines budget reductions at Yale University to be on the order of 10% for FY2009–2010; the University of Florida has posted plans to cut over $2.6 million from its library budget. . ."[19] According to the Association of Research Libraries Source of Funds 2009-2010 survey, the majority of the ARL libraries, and most likely libraries in general, receive 75% to nearly all of their funding from the state of institution allocation. In rare cases, such as the University of Houston Libraries, receive nearly half of their funding from student fees. This is more often than not the exception rather than the rule.[20] Desperate times call for desperate measures and libraries have had to branch out into creative and non-traditional areas of funding and fundraising in order to make up for the budget cuts imposed by the state or their own institutions.

	Source of Funds 2009–2010						
	State or Institutional Allocation	Campus Local Funds from Indirect Cost Recovery/ Sponsored Programs	Gifts & Endowments	Grants & Contracts	Auxiliary	Student Fees	Other
ARL Library (Public)							
ARIZONA	74	14	2	1	5	4	0
ARIZONA STATE	98	1	0.5	0.3	0.2	0	0
CALIFORNIA, SANTA BARBARA	96.6	0	2.4	0.2	0.7	0	0.1
COLORADO	95.65	0	2.34	0.2	0.35	0	1.46
DELAWARE	92.6	0	3.65	3.13	0.62	0	0
FLORIDA	91	4	1	2	2	0	0
FLORIDA STATE	94.2	0	0.66	0	0.97	2.85	1.32
HOUSTON	48	0	1.9	0.1	0	50	0
IOWA	95	0	1.6	1.8	1.6	0	0
KANSAS	93	0	2	0	0	3	2
KENT STATE	91.35	0	0.01	0.54	7.7	0.4	0
KENTUCKY	87.6	0	9	3.4	0	0	0
MASSACHUSETTS	45	0	3	1	1	0	50
MICHIGAN	92.65	1.13	2.98	0.18	0.32	0	2.74
MICHIGAN STATE	98.67	0	0.28	0.01	1.03	0	0
MINNESOTA	91	0	5	1	3	0	0
OHIO	92.94	0	2.02	1.19	2.29	0	1.56
OREGON	82.8	2	7.3	2.7	5.2	0	0
PENNSYLVANIA STATE	80.78	0	4.25	2.02	0	12.8	0.15

Cuillier and Stoffle point out that many libraries have tried funding from these major areas:
- Annual Campaigns
- Capital Campaigns
- Friends Groups
- Gifts, Endowments and Planned Giving
- Grants
- Joint Venture with Athletics
- E-Commerce
- Cafes
- Library Credit Courses
- Advertising
- Rights and Reproductions
- Fee based services and User Fees
- Student Fees

Friends or Partners of the Library or Museum

Since 1925, the first Friends of the library group appeared at Harvard.[21] Today, libraries across the nation have friends groups to provide support to supplement funding for the library. However, it is estimated that "43.7% of academic libraries had a Friends group and that nearly a third of the groups were not successful at Fundraising."[22]

Despite those statistics, there are several Friends groups that are successful. As cultural institutions, libraries and museums enjoy a revered place among individuals and families with large net worth. Lowman reports that there are a variety of activities that the library engages in that contribute to a successful friends program: [23]

- o Distinguished Guest Lectures

- o   Reception to Honor Authors, Artists, Editors, and Composers associated with institution
- o   Book Sales
- o   Gala Events

Benefits include supporting new initiatives and successful ongoing programs. In an ideal situation, a Friends program is a synergistic win-win partnership between the community and the library providing a steady stream of income and supporting library operations and increasing the collections. At worst, it's a ball and chain obligation that the library or museum is forced to house a collection that it has little use for and takes up valuable space in return for a large donation.[24]

Libraries compete with other academic programs on campus and suffer from the lack of alumni that traditionally support academic programs or units. Privately funded institutions tend to also have greater freedom than public supported institutions that may have more restrictions on how they raise money.   In any case, the library must commit to keep a friends of the library program sustainable by investing the proper time, resources, staffing, and money generating activities to make the return on investment a worth the venture. Museums have been more successful at dedicating staff to direct programming for fundraising and support programs and by observation conclude that together with largely volunteer efforts museums can scale fundraising events more successfully.

Grants

According to the *ARL 2009-2010 Source of Funds Survey*, some libraries can receive upwards of five percent of their funding from grants. Since grants can come in different types, such as one-time funding or multiple year funding, it is something that may not be ideal for day-to-day funding for the library, but may be better suited for special projects or one-time improvements.[25] Too add to the complex nature of grant funding, grants based on endowment funding tend to be more dependent on the economy rather than grants based on public funding.[26] It is certainly possible that endowment/foundation based grants could face the same cyclical difficulties as academic institution funding and the competitive nature of grant funding could further increase as funding levels overall tend to decrease. Today, the IMLS (Institute of Museums and Library Services) federal grant program is one of the best and most competitive sources of funding for museums, archives and libraries in the United States. According to its website, the IMLS is creating opportunities for:
- Building 21st century skills – in conjunction with the MacArthur Fund to promote innovation – ie) learning labs
- Workforce development
- Early learning
- Building digital success
- Connecting to collections[27]

Joint Ventures

Some universities have created joint ventures between the university athletics department and the library.[28]
By diverting a percentage of income generated by athletic events to the library, collections and library services can be enhanced. Examples of this may be contributing resources for study rooms and tutoring for athletes. However, this can become problematic and uneven depending on the athletic team performance in a given season, when revenues may vary.

Library cafes are still in vogue as books and caffeinated beverages go hand in hand. These operations are joint ventures between the campus catering and the library, private enterprise (i.e. Starbucks and the library), or student-run operations and the library. LaPointe mentions a joint venture between faculty, students, campus catering, and the library to create a café in the library.[29]   In addition to serving coffee and lattes, the café has become a meeting space, exhibition space for student artwork, and a venue for live entertainment. Often times library cafes produce a positive income stream for the library, at the University of Arizona, Bookend Café located in the library, roughly 50% of the profits goes to the library.[30] Café revenues do not always get allocated to the library budget.

Museums have had restaurants and cafes a lot longer than libraries. Some of the same rationale justifies those entities and they contribute to another reason that visitors come – they stay longer, meet up with friends and the

museum has another function it provides. Both institutions are also occasionally used for special events and can be rented out for civic or campus entertainment or as a fee generating venue.

Theatres or mixed use auditoriums are also common environments in both libraries and museums. Media to showcase enhancements of special exhibits is increasingly common both within the exhibit space and in a separate room. Libraries have explored holding lectures, panels, discussions, concerts, showing films within their real estate to demonstrate links to different media such as performance art and to compliment exhibits and explain collection details.

Conclusions

Infotainment versus edutainment? This may be a simplistic and rhetorical question to pose, but hardly inappropriate in the current social and cultural climate we face and experience. These challenging economic times lead and encourage organizations and institutions to partner and collaborate, reinforcing common missions and to learn from one another. Research for this paper affirms the synergies, intersections and opportunities, and suggests that in the academic sector, museums, archives and libraries have much to share. Like a decade ago, when it was common for Information Technology and Library units to join together administratively because of their mutual commitments to information, communication and technologies, it is now time to more formally recognize the alignments between museums and libraries. Museums like libraries have a strong alliance in professional societies and we think the American Association of Museums (http://www.aam.org), the Museum Educational Site Licensing Project (http://www.fmch.ucla.edu/MESL/mesl.htm), the Museum Computer network (http://www.mcn.edu), Educause (http://www.educause.org), Online Scholary Cataloging Initiative
 (http://www.getty.edu/foundation/funding/access/current/online_cataloging.html),   and   the   American   Library Association (http://www.ala.org), for instance, have much in common. As Allen and Bishoff stated in a conference paper, "…museum academic library partnerships lead to many positive experiences and pave the way for advances that are in the public good."[31] Higher Education and the global museum community have much in common and it is in each of their best interests to promote great opportunities for cooperation and collaboration and ways to learn from one another. Social media due to its widespread adoption by younger generations; its impact on learning, entertainment, and social exchange; and the opportunities for online commerce suggest that it is a viable series of strategies that should be employed in museums, archives and libraries to the extent that it is effective, cultivates and serves users and provides value. Perhaps the TwitterQuest that was attempted at Indiana University to promote visits to the Campus Archives and other local museums by conducting a social media scavenger hunt will be tested by other communities. [32]

---

[1] Dell and Intell. (2011). The evolving workforce, Report #2: The workforce perspective," December 11, 2011, Executive Summary, 4. http://www.intel.com/content/.../dell-intel-evolving-workforce-report.html
(viewed August 26, 2012)

[2] *Ibid,* 5-11.

[3] Wavell, C., Baxter, G., Johnson, I., and Williams, D. (2002). Impact of evaluation of museums, archives and Libraries: Available Evidence Report. Aberdeen, Scotland, UK: Information Management, Business School, Robert Gordon University, (http://www.resource.gov.uk/documents/id16rep.pdf)

[4] *Ibid,*78.

[5] Russo, A., Watkins, J., Kelly, L., Chan, S. (2006). How will social media affect museum communication? *Proceedings of the Nordic Digital Excellence in Museums Conference, Oslo.* *http://eprints.qut.edu.au/6067/1/6067_1.pdf (viewed October 12, 2012)*

[6] Hooper-Greenhill, E. (2004). Measuring learning outcomes in museums, archives and libraries: The Learning Impact Research Project (LIRP). *International Journal of Heritage Studies* 10, (2): 154.

[7] *Ibid*., 164.

[8] Kinds of Literacy. http://c2.com/cgi/wiki?KindsOfLiteracy (viewed July 22, 2012)

[9] *Ibid*

[10] Lin, personal communication, 2012

[11] Yucelt, U. (2000). Marketing Museums: An Empirical Investigation Among Museum Visitors. *Journal Of Nonprofit & Public Sector Marketing*, *8*(3), 3

[12] Eschenfelder, K. R. (2008). Every Library's Nightmare? Digital Rights Management, Use Restrictions, and Licensed Scholarly Digital Resources. *College & Research Libraries*, 69(3), 205-225.

[13] *Ibid*

[14] Schiller, K. (2010). A Happy Medium: Ebooks, Licensing, and DRM. *Information Today*, *27*(2), 1–44.

[15] Jacobson, T. B. (2011). Facebook as a Library Tool: Perceived vs. Actual Use. *College & Research Libraries*, 72(1), 79-90.

[16] Aharony, N. (2012). Facebook use in libraries: an exploratory analysis. *Aslib Proceedings*, 64(4), 358-372. doi:10.1108/00012531211244725

[17] Jacobson, T. B. (2011). Facebook as a Library Tool: Perceived vs. Actual Use. *College & Research Libraries*, 72(1), 79-90.

[18] Kidd, J. (2011). Enacting engagement online: framing social media use for the museum. *Information Technology & People*, 24(1), 64-77. doi:10.1108/09593841111109422

[19] Lowman, S. S., & Bixby, M. D. (2011). Working With Friends Groups: Enhancing Participation Through Cultivation and Planning. *Journal Of Library Administration*, *51*(2), 209-220. doi:10.1080/01930826.2011.540551

[20] Cuillier, C., & Stoffle, C. J. (2011). Finding Alternative Sources of Revenue. *Journal Of Library Administration*, *51*(7/8), 777-809. doi:10.1080/01930826.2011.601276

[21] Hood, J. M. (1991). Library friends. In B. I. Dewey (Ed.), *Raising money for academic and research libraries: A how-to-do-it manual for librarians* (pp. 11–26). New York: Neal-Schuman Publishers.

[22] Cuillier, C., & Stoffle, C. J. (2011). Finding Alternative Sources of Revenue. *Journal Of Library Administration*, *51*(7/8), 777-809. doi:10.1080/01930826.2011.601276

[23] Lowman, S. S., & Bixby, M. D. (2011). Working With Friends Groups: Enhancing Participation Through Cultivation and Planning. *Journal Of Library Administration*, *51*(2), 209-220. doi:10.1080/01930826.2011.540551

[24] D'Andraia, F., Fitzpatrick, J., & Oliver, C. (2011). Academic Libraries and Friends Groups: Asset or Liability?. *Journal Of Library Administration*, *51*(2), 221-230. doi:10.1080/01930826.2011.540553

[25] Landau, H. (2010). Winning Grants: A Game Plan. *American Libraries*, *41*(9), 34-36.

[26] Katja Lindqvist (2012): Museum finances: challenges beyond economic crises, *Museum Management and Curatorship,* 27:1, 1-15

[27] http://www.imls.gov/ (viewed October 16, 2012)

[28] Cuillier, C., & Stoffle, C. J. (2011). Finding Alternative Sources of Revenue. *Journal Of Library Administration*, *51*(7/8), 777-809. doi:10.1080/01930826.2011.601276

[29] Lapointe, L. M. (2006). Coffee anyone?. *College & Research Libraries News*, *67*(2), 97-99.

[30] Cuillier, C., & Stoffle, C. J. (2011). Finding Alternative Sources of Revenue. *Journal Of Library Administration*, *51*(7/8), 777-809. doi:10.1080/01930826.2011.601276

[31] Allen, N. and Bishoff, L. (2001). Academic library museum collaboration: I'm ok, you're ok. Proceedings of the Tenth ACRL National Conference, Denver, CO: 68. http://www.ala.org/acrl/sites/ala.org.acrl/files/content/conferences/pdf/allen.pdf (viewed August 31, 2012)

[32] TwitterQuest and the Alliance of Bloomington Museums & Archives https://blogs.libraries.iub.edu/iubarchives/2012/04/02/twitterquest/ (viewed October 15, 2012)