

Academic Librarians and the Sustainability Curriculum: Building Alliances to Support a Paradigm Shift

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Abstract

Sustainability is a fast evolving movement in higher education demonstrated by a proliferation of academic programs, co-curricular initiatives, and campus projects. Sustainability is now viewed as vital to the mission of many institutions of higher education, creating a paradigm shift that librarians can help advance with their collective interdisciplinary expertise. A review of LibGuides (online resource guides) showed that academic librarians are involved with sustainability efforts on many campuses and have a role in shaping curriculum-related activities. The author administered a survey to creators of sustainability LibGuides during the spring of 2011, posting the survey on library listservs as well. Librarians returned 112 survey responses that illustrated their engagement in sustainability activities through the forging of campus partnerships with administrators, faculty, staff from the Office of Sustainability, and library colleagues. Telephone interviews conducted with 24 of the respondents showed librarians' wide-ranging professional interest in sustainability, and their initiatives to promote its cause, including creating resources, collections, exhibits, and events; library instruction; co-teaching with faculty; serving on sustainability committees; and collaborating with sustainability faculty and staff. However, both the survey and the interviews suggest that librarians would benefit from increased collaboration and knowledge of work undertaken elsewhere. Moreover, as the needs of students and faculty studying sustainability increase, libraries need to appoint librarians with special responsibilities in this field. Included is the author's experience as the Sustainability Studies Librarian at the University of Massachusetts Amherst and her engagement in professional development activities related to sustainability. Best practices for librarians to advance sustainability efforts are offered.

Keywords: Sustainability; Curriculum; Partnerships

Introduction

As of March 2014, 680 presidents of universities and colleges have signed the American College and University President's Climate Commitment (ACUPCC) which both promotes sustainable facilities management and drives the integration of sustainability studies activities into the curriculum. Co-curricular activities that connect to or mirror the academic experience are also intended to be infused with sustainability. The Association for the Advancement of Sustainability in Higher Education (AASHE) lists 1,400 "sustainability-focused academic programs" at 460 campuses in 65 states and provinces. The programs include Master's, Baccalaureate, and Associate degrees, as well as certificate programs, minors, specializations and concentrations. The range of disciplines includes Agriculture; Architecture; Biological Sciences;

Business; Cultural Studies; Economics; Education; Engineering; Environmental Studies; Law; Landscape Architecture; Urban Studies; Social Justice; and many more.¹

Librarians, already accustomed to communicating across disciplines, are uniquely positioned to build bridges and forge partnerships between the seemingly disparate array of departments offering sustainability courses and programs. The trans-disciplinary nature of these studies gives librarians rich opportunities for contributing education, outreach, research and new initiatives as well as fund-raising for such innovations. These activities promote the library as a neutral space for collaboration and cross-pollination. Librarians may also be stimulated to develop a more team-based approach among



library colleagues as they cross into one another's subject specialty areas.

LibGuides, topical online resource guides, provide a window into the work of librarians. They also allow librarians to discover one another's work based on subject expertise, which could lead to collaboration between librarians not formerly acquainted. A search of Springshare's directory of LibGuides reveals hundreds of sustainability-related examples created over the past seven years by academic librarians who contributed to this vibrant area of study and action.² Yet little is known about the librarians behind these guides. What motivates them professionally and personally? In what other practical ways are they engaging in advancing sustainability, particularly within the curriculum? How can these librarians connect to one another within the library community to gain inspiration and support for this growing area of professional responsibility? This lack of information about their sustainability efforts and potentially fruitful collaborations leaves a void. To elicit more information, I developed and administered a survey about academic libraries and sustainability in the curriculum. The results and the subsequent follow-up interviews reveal numerous sustainability projects, a well of emerging expertise, and flourishing connections among campus partners, though formal connectivity among sustainability-minded librarians themselves is lacking.

Sustainability Defined

The word sustainability can seem vague or focused solely on environmental issues. The World Commission on Environment and Development (aka Brundtland Commission) defined sustainability in a 1987 report as, "...development that meets the needs of the present without compromising the ability of future generations to meet their own needs."³ This early definition has evolved into a broader awareness of interconnected human and natural systems. In *The Sustainability Revolution: Portrait of a Paradigm Shift* Andres R. Edwards tells the story of the birth of the modern sustainability movement. The author writes of pivotal meetings of world leaders including the 1992 Earth Summit in Rio de Janeiro, Brazil. One product of this

meeting was Agenda 21 that revealed common values of 178 countries through the linking of environment with economic and social development – no longer considered isolated aspects of life on earth.⁴ These three aspects of sustainability are also now commonly referred to as the "triple bottom line," the "three legs of the stool," and the "three E's" (ecology, economy, equity). Edwards suggests adopting a fourth E -- for education.⁵ Thus, sustainability is *not* simply about "being green." It is a transformative movement that demands a paradigm shift toward rethinking and reworking how we live, learn and interact on the planet.

Higher Education and Sustainability

The teaching of sustainability in colleges and universities is based on decades of grassroots efforts. However, the president of a college or university gives teeth to curricular innovation by signing the ACUPCC. The document states that, "integrating sustainability into their curriculum will better serve their students and meet their social mandate to help create a thriving, ethical and civil society."⁶ A president's signature indicates pointed recognition of the negative effects of global warming and acknowledges the urgent need to reduce the emission of greenhouse gases on that campus. Institutions must develop an action plan for becoming climate neutral, including a target date and mandatory progress reports. One of the commitment's objectives is to formulate "Actions to make climate neutrality and sustainability a part of the curriculum and other educational experience for all students."⁷ It is worth noting that the *Princeton Review* reported that 69 percent of prospective college students say that the eco-friendliness of different campuses would influence their decisions about where to apply.⁸ This type of competitive information gets the attention of campus administrators. Another notable shift on college campuses is the hiring of administrators to supervise sustainability efforts with varying titles such as Sustainability Coordinator, Sustainability Manager, and Director of Sustainability. The number of such positions increased from 23% of U.S. and Canadian campuses in 2010 to 67% in 2012, suggesting that they are becoming the norm.⁹ For the purposes of this

article, the position will be referred to as Sustainability Officer.

Librarians and Sustainability: A Natural Fit

Libraries have long been on the frontlines of social movements, providing the sites, services, and resources to educate, inspire, and connect their communities. Librarianship particularly lends itself to the sustainability movement that hinges on systems thinking that “views the organization as a complex, organic, and evolving entity with unlimited capacity to learn, create, and pursue future aspirations.”¹⁰ This multifold view supports sharing knowledge between different groups and using effective communications to build positive relationships. The sustainability movement is therefore a natural fit for academic librarians who tend to excel at gathering, synthesizing, and disseminating information as well as communicating across disciplines. In the context of higher education institutions, librarians provide a crucial aspect of training for our next generation of leaders. Librarians lead students to the authoritative information, enabling these future leaders to be more effective sustainability educators, advocates, activists, agitators – to be agents of change.

How Do Librarians Define Sustainability?

Because there are multiple, varied, and fluid definitions of “sustainability,” interviewees were asked at the outset to contribute their own definition. Some offered definitions close to that of the Brundtland Commission’s. Another offered a community-based example of her library’s role: “Last year we showed ‘Bag It’ – then someone in our community started an anti-plastic bag campaign. Showing the film made an actual difference in our community.” Some responses were communicated through the lens of the curriculum as in the case of a librarian who described herself as “riding the fence between science and social science.” She looks at sustainability as “related to public health, the long term health of people.” A librarian in an agricultural school viewed it as “a multidisciplinary concept...with a triple bottom line: people, plants and profit.”

When asked to identify any barriers to communicating or interactions with others around sustainability, several responses referred to the challenge of organizing their time and resources in this trans-disciplinary area. One librarian’s response spoke of the “holistic” approach developed by selectors, driven by the need to sort through their overlapping areas. “No one *does* sustainability collection development per se. Sustainability is embedded in the business school. The Earth Institute is under the Sciences but also Public Policy. Different librarians are involved. Selectors across the disciplines had a meeting. As a group we subscribed to some new resources and shared expenses.” In the article, “Building an Academic Library Collection to Support Sustainability,” the authors refer to interdisciplinary collection development as a “wicked problem.” That is, “a complex endeavor that requires interdisciplinary cooperation, tailoring of collections to local issues, and enough tact and diplomacy to avoid the pitfalls of academic turf wars.”¹¹ This “wicked problem” may also rear its head when faculty and students request research assistance for a sustainability topic. It’s not always clear which liaison librarians to call upon. These challenges speak to the need for clear communication and flexibility between librarians as they touch into subject areas (aka “territories”) that may become intertwined. In so doing, librarians will be better able to support growth and change within the curriculum.

Additionally, it highlights the need for librarian positions that include sustainability studies within their duties so librarians may manage this evolving landscape more effectively and support sustainability courses and programs.

Literature Review

Library literature reveals much about the emerging role of librarians in the sustainability movement. In “The Green Library Movement: An Overview and Beyond,” Monika Antonelli traces the history of sustainability-related library research through 2008, beginning with the establishment by the ALA of the TFOE in 1989. The TFOE prompted a surge in articles on sustainability in the library literature and the appearance of *The Green Library Journal: Environmental*

Topics in the Information World in the early 1990's.¹² In the past few years there has been a surge of titles that reflect the intersection of libraries and the sustainability movement. A 2011 book chapter titled, "Librarians as Sustainability Advocates, Educators and Entrepreneurs," co-authored by Sarah Dorsey, Beth Filar Williams, and Anne Less, profiles sustainability leaders in the library profession according to their roles as advocates, educators, entrepreneurs, and embedded librarians.¹³ This chapter also picks up the thread of sustainability-related library research from the early 2000s. The 2012 book, *Greening Libraries*, edited by Monika Antonelli and Mark McCullough, looks at the next wave of sustainability-related accomplishments within the library community. Most relevant to this article are the excellent chapters on academic programming and outreach.¹⁴ The 2014 book, *Focus on Educating for Sustainability: Toolkit for Academic Librarians*, edited by Maria Jankowska, offers sustainability-related best practices, case studies, and activities in academic libraries such as collection development, information literacy, sustainability scholarship, and new directions such as organizing library green teams, creating seed libraries and the greening of library buildings.¹⁵ Nearly half of the chapters are written by more than one author, which reflects a collaborative approach to many of these professional activities.

Sustainability and Collaboration at University of Massachusetts Amherst

With over twenty years of experience as an academic librarian, I also hold an MA from the Conway School of Landscape Design, a cross-disciplinary program that teaches ecologically and socially sustainable design of the land. My liaison areas cover landscape architecture, regional planning, and agriculture. Over the past few years, as sustainability courses mushroomed on campus, my expertise became better known and I was called upon for assistance from a wide range of disciplines. In 2012, Sustainability Studies was added to my liaison areas on the UMass Libraries' directory of subject specialists. This official designation of duties by the library administration opened the door to more professional development resources, teaching experiences, and leadership opportuni-

ties, and amplified my capabilities for outreach and collaboration on campus.

Due to my multiple contact points, the UMass Libraries Director of Communication and Development asked for my assistance with drafting a proposal for a Sustainability Fund for the Libraries. Launched in 2012, the Fund proved to be one of the most successful campaigns in the Library's history of fund raising, garnering from donors \$150,000 within a few months.¹⁶ In 2013, the Fund won the Gale Cengage Learning Financial Development Award for "meritorious achievement in creating new means of funding for a public or academic library."¹⁷ The Sustainability Fund is used to acquire databases and media resources, sponsor events, support initiatives, and host exhibits.

However, moving beyond official liaison areas is not without challenges. If an architecture professor requests library instruction for a green building course or a public policy professor sends students for assistance with a food policy project, I make a point of informing the liaisons from those disciplines so as not to "step on toes." One way that friction has been minimized and outreach maximized is through the Sustainability Curriculum Initiative. This mini grant program is for faculty members teaching sustainability courses and who agree to integrate licensed library resources into their assignments. Library liaisons work closely with each faculty member to design assignments and provide instruction as well. I meet with liaison librarians to ensure their understanding of the program, exchange ideas about creating resources, and encourage partnerships with their faculty members.¹⁸ While professional development programs for sustainability faculty exist in other institutions, the one at UMass Amherst is unique as it is funded by the library (through the Sustainability Fund) and administered primarily by a librarian. In addition, all the activities take place in the Teaching Commons, a space designated for faculty-librarian collaboration. Jeffrey A. Knapp, in his article, "Plugging the 'Whole': Librarians as Interdisciplinary Facilitators," refers to librarians as "connectors" for interdisciplinary researchers.¹⁹ He also writes of the importance of collaborative space so that libraries,



“...function as a central core of their college or university.”²⁰ Both of these factors, connecting and sharing space, are integral to this curriculum initiative.

A further outgrowth of my sustainability engagement was co-teaching a four-credit General Education course at UMass Amherst called “Sustainable Living” in spring 2013. Along with two faculty members, we redesigned the course to include “Beyond Google,” an online discussion forum based on information literacy exercises. Each week, students were exposed to a different type of resource and guided through an online exercise that supported the course content while simultaneously promoting library services and resources.²¹ The classroom provided the author with a testing ground for sustainability assignments. The experience and materials were shared with library colleagues as well as at an information literacy conference, demonstrating the librarian’s embedded role in the sustainability curriculum.

Sustainability LibGuides: The Basis of a Survey

As sustainability sprang up across the curriculum at UMass Amherst, I began to wonder how other librarians were supporting programs at their institutions. Expecting to find only dozens of other sustainability LibGuides, I was pleasantly surprised to find hundreds of sustainability-related guides. The ideas, vision, and implementations revealed in these myriad guides provide other librarians with insights into their own next steps, the confidence and energy to move forward at their institutions, and a practical way to identify their counterparts within academic librarianship.

Launched in 2007, LibGuides enables librarians to share content and better understand one another’s expertise and involvement in the curriculum. The use of LibGuides is on the rise. In its initial year, only 87 academic libraries used LibGuides. By the end of 2013, there were 2,888 academic libraries employing this method for creating and sharing resources.²² A review of academic, sustainability-themed guides on the LibGuide community site and found that sustaina-

bility topics made up a significant body of information.

To better understand this emerging area of professional responsibility, I developed and administered a survey called “Academic Libraries and Sustainability in the Curriculum.” Combined with subsequent interviews with selected respondents, the survey results reveal numerous sustainability projects, emerging expertise, and vibrant connections among campus partners, though the lack of formal connections among sustainability-minded librarians leads to the question of how they might develop ways to connect and collaborate within the library profession. My involvement in sustainability at the University of Massachusetts Amherst is included as a specific example of a librarian who has been officially assigned to the liaison area of Sustainability Studies. While the survey provides quantitative data and insights, more detailed and nuanced responses were elicited through the telephone interviews.

Methodology

The project began in February 2011 with a search of the LibGuides Community site. Filtering to only include “Academics” and using the keyword “sustainability” yielded hundreds of guides. In the spring of 2011, an online survey was sent to 511 librarians who had created the most robust, sustainability-related LibGuides. The survey was also distributed through library listservs, including one serving the American Library Association’s (ALA) *Task Force on the Environment* (TFOE) and another for the Science and Technology Section of the Association of College and Research Libraries (ACRL). Besides uncovering the number and type of LibGuides these librarians had produced, the survey also provided librarians with an opportunity to describe their experiences engaging with campus sustainability committees, involvement with curricular activity related to sustainability, partnerships with sustainability entities on campus, and professional development experiences. Follow-up telephone interviews took place during the summer of 2011. The 24 interviewees were selected from those who identified themselves as volunteers for this service in the survey and from the overall richness of their survey



answers. Interviews lasted an average of 30 minutes and included up to nine pre-determined questions. Institutions were well represented across United States regions as: east (ten), south (six), Midwest (four), southwest (two) and west (three).

Discussion

The survey results, interview responses and the UMass Amherst Libraries example present a multi-faceted picture of librarians who are actively engaged on their campuses as advocates, subject experts, educators and collaborators. Sustainability-minded librarians have both existing and emerging expertise and interests, and clearly have much to say about how to rebuild our world with more resilience, inclusivity and integrity. While formal connections among librarians committed to the sustainability movement are still lacking, the interviews elicited ideas for remedying this situation. The findings of the survey and interviews testify to both librarians' ability to build bridges and to navigate the "silos" of higher education to create sustainability networks within the library profession.

Demographics

Respondents were asked to name their institution, including geographic location and number of students. All, except for two community colleges, were 4-year colleges or universities with a wide range of geography and numbers of students served. In stating their professional titles, 46 of 112 respondents named a disciplinary area. As Table 1 shows, the breadth of subject areas reflects the multidisciplinary nature of sustainability topics and the wide range of expertise among librarians supporting these academic areas. Of the 46 respondents indicating a subject responsibility, 52.2% indicated an area of the sciences as their primary focus; 21.7% reported a social science discipline; 15.2% stated a responsibility in the arts or humanities; and 6.5% reported that they had responsibility for a professional program. Only 4.3% reported primary responsibility for sustainability.

Secondary disciplines, when offered, included Agriculture, Classics, Computer Science, Forest-

ry, Geography, GIS, Map, Mathematics, Medieval Studies, Military Studies, Physics, Planning.

Table 1: Discipline Areas of Librarians

Science	7
Biology	5
Architecture	4
Engineering	4
Social Sciences	4
Business	3
Chemistry	1
Environmental Science	3
Economics	2
Physical Sciences	2
Sustainability	2
Food Science	1
Art	1
Geology	1
Education	1
Government Information	1
History	1
Music	1
Political Science	1
Technology	1

Table 2 reveals that while 57 other respondents did not name specific disciplines in their titles, their library positions reveal involvement from a range of library departments and levels of administrative responsibility. This implies that sustainability awareness and engagement is occurring from a variety of librarian perspectives with opportunities for collaboration across library departments. There were 9 respondents identified as Associate/Faculty Librarian or Professor and did not define a library department.

Table 2: Non-discipline Related Areas of Librarians

Reference/Research/Instruction	26
Information Instruction/Design	7
Public Service/Outreach	6
Director/Head Librarian	4
Information Literacy	3
Electronic Resources	3
Cataloging	2
Distance Learning	2
Circulation	1
Assessment	1
Digital Curation	1
Emerging Technologies	1

In their book, *Transforming Libraries, Building Communities*, Edwards, Robinson, and Unger refer to collaborations as, “a vital way that libraries connect with the greater community. It is through the relationships formed by library/community partnerships that social capital is built. This development of social capital is a crucial part of community building.”²³ Because sustainability traverses so many disciplines, outreach efforts are an efficient way to form relationships across the campus community within multiple departments, offering curricular support and good will that may be fruitful for years to come.

The wide range of LibGuide topics presented by librarians in the survey reflects librarians’ presence across the sustainability curriculum. Respondents were provided with a list of sustainability guide topics based on observation of topics from the original scan of Springshare’s directory. Because some respondents had created more than a single sustainability LibGuide, they were asked to select topics that were relevant to all their guides (thus, the chart does not add up to 100%). Table 3 reveals that while 47.2% of librarians had created general sustainability guides, more granular topics ranged across social (e.g. Sustainable Lifestyle), economic (e.g. Corporate Social Responsibility) and ecological issues (e.g. Renewable Energy). This range reflects librarians’ awareness of and curricular support for the “three E’s” as mentioned in the Sustainability Defined section of this article. Lesser-covered topics, not shown here, are listed in the appended survey. Under “Other,” 31 respondents provided unique topics such as Socially Responsible Investing, Sustainable Forest Management, Wetlands Ecology, Environmental Toxicology, Sustainable Practices for Civil & Environmental Engineers, Sustainable Preservation, Sustainable Art and Higher Education, NW Earth Institute Discussion Course Booklets, and General Environmental Studies.

Table 3: Top 25 LibGuides by Topic (n=112)

Sustainability Topics	Percent Respondents
Sustainability (general)	47.2%
Renewable Energy	36.0%
Climate Change	33.7%
Sustainable Building & Design	23.6%
Environmental Health	22.5%
Water Conservation	19.1%
Recycling	16.9%
Biodiversity	14.6%
Endangered Species	14.6%
LEED	14.6%
Sustainable Development (Urban)	14.6%
Sustainable Agriculture	13.5%
Sustainable Landscape Design	12.4%
Community Building	12.4%
Local Food	12.4%
Corporate Social Responsibility	11.2%
Sustainable Transportation	11.2%
Waste Reduction	11.2%
Air Quality	10.1%
Food Security	10.1%
Sustainable Development (Rural)	10.1%
Sustainable Food Systems	10.1%
Sustainable Law/Policy	10.1%
Sustainable Lifestyle/Health	10.1%
Sustainable Technology	10.1%

Interviewees discussed their interactions with sustainability courses, programs, degrees, and certificates on their campuses, uncovering a wide array of approaches to engagement. In some instances librarians played an equal role in course development, co-teaching a course, or co-authoring a course textbook. There were several references to serving as “embedded librarians” in courses, both online and face-to-face. Others spoke of creating book displays and organizing speakers and conferences connected to particular programs. One campus fully incorporates librarians into project-based sustainability seminars for all first-year students. Using a “Personal Librarian” approach, librarians offer training to each class in lab settings as well as research consultations for each team. Several respondents referred to LibGuides as a means to connect with students through courses. On a related note, interviewees unanimously agreed that a compilation of academic sustainability LibGuides would be of use.

Question 6 of the survey asked whether the campus had an Office of Sustainability (OoS) or similarly named entity. Of the respondents, 70.3% answered affirmatively while 17.1% do not have an OoS and 12.6% were not sure. In the interviews, the discussions about relationships between the library and the Office of Sustainability were consistently positive. Many interviewees had longstanding roles in sustainability committees, councils, and task forces, which led to continuous and collegial contact with Sustainability Officers. One librarian gave the example of co-organizing a sustainability poster competition with her Sustainability Officer as a companion piece to an event held at the Library. Many interviewees reported the Sustainability Officer attending library meetings. Collaborative activities included identifying sustainability courses, Sustainability Tracking, Assessment & Rating System (STARS) assessment related to curricular activities, setting up a satellite lending library in the OoS, and co-facilitating a reading group. Several responses included adding library links and database widgets to the OoS website. One librarian who was in the early stages of developing connections with the OoS said, “It’s a matter of getting more comfortable - - consciousness-raising.” Another librarian who

experiences a very solid connection to her OoS reported that they often included sustainability topics about the library in their newsletter. With a laugh, she referred to the OoS staff as “evangelists.”

Question 8 of the survey asked about curriculum-related connections or communications that librarians have with the Office of Sustainability or its staff. About 26% (29 out of 112 respondents) were able to articulate some measure of curriculum-focused communication or connection with their OoS. In many cases, multiple connections were given. Many related these connections to their active role on their campus Sustainability Committee. Librarians also met with their Sustainability Officer to plan events, student internships, faculty fellow programs, and discussion groups; co-teach courses; co-create guides and collections to support events and courses; track faculty and courses on campus that touch on sustainable topics; identify library guides and add RSS book feeds to the OoS web site; provide general orientations to library resources; and organize campus-wide sustainability institutes. A specific example is a Librarian-Sustainability Officer duo that used library funds to purchase Northwest Earth Institute booklets and co-facilitate an 8-week course. The booklets were then added to the library collections. Several responses told of developing and teaching (or co-teaching) for-credit sustainability courses with the Sustainability Officer, including library research sessions. One librarian described her role as Liaison with the School of Sustainability and explained that attending their lecture series, roundtables, and symposiums led to the creation of various library guides that linked to their large introductory course. One librarian provides all incoming students with library instruction sessions that include a sustainability component.

Chart 1 offers a broad view of the activities in which librarians are engaged: creating LibGuides; participation on campus committees; professional relationships with sustainability staff; and professional development activities. Based on interview responses, the low level of participation in professional development activities is often not by choice but rather due to lack of funds or administrative support.



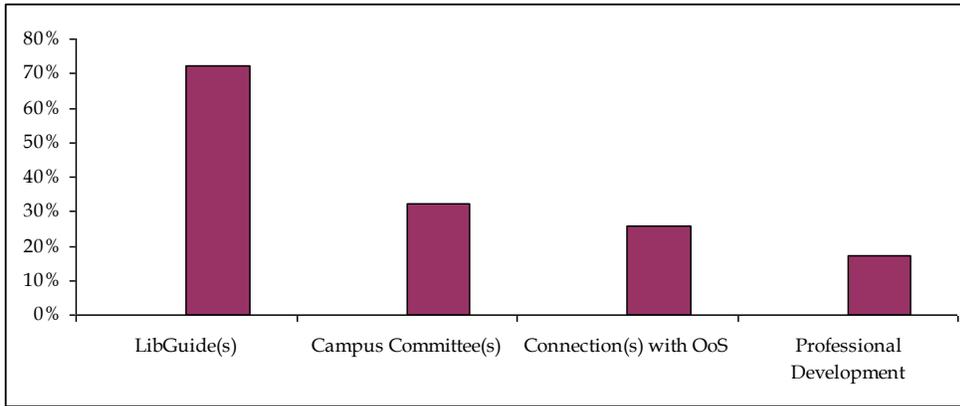


Chart 1: Librarians' Curriculum-Related Engagement with Sustainability Issues (n=112)

LibGuide(s)	72.30%
Campus Committee(s)	32.10%
Connection(s) with OoS	25.90%
Professional Development	17.00%

Question 9 reveals that about 32% (36 out of 112 respondents) indicated past or present engagement with committees or councils related to sustainability in the curriculum. Many respondents served on campus sustainability committees, councils and task forces, with several serving as chair or co-chair of such committees. More focused participation included planning committees for sustainability seminars, conferences, symposia, and institutes. Some participants are involved with faculty-based groups such as multi-disciplinary curriculum planning, professional development, or discussion groups. One librarian cited involvement with a committee that oversees their campus participation in STARS, in particular the curricular section. Finally, there was also involvement with campus "green teams" comprised of faculty, staff, and students.

Various interview responders spoke to librarians being specifically called upon to contribute their expertise to sustainability-related committees and campus initiatives. One librarian served as the Environmental Stewardship Committee liaison by the request of the Library administration, because of his environmental background. A librarian with 26 years of service at her institution was asked by the university president to launch a symposium on reducing and reversing trends of environmental degradation, economic

instability, and social inequalities. Another librarian played a key role in developing a campus wide sustainability program, and building information literacy outcomes into the curriculum. She reported that, "Part of it was selling it [the information literacy component] to faculty I had just met, offering a compelling argument of why we had to have this in our curriculum for these programs. People were really into it.... Instruction programs have increased 50%." A librarian who served on the Environmental Caucus offered a description of a more expanded role:

I developed relationships with faculty that would have never happened without this group. It opened doors for teaching faculty understanding of 'library-ese' mapping across the curriculum, including Information Literacy standards. Faculty members are more ready to come to me with ideas now. [Name of program] is a place where themed material comes together and can be used by any users - it is a physical space and an online space.... It is a permanent part of the University mission. This helps justify my actions and work... [and] helps make this an integral part of what I do. I am part of the [Initiative] which is run through the Faculty Development Office - working with groups across every department to discuss ideas, methods, and resources.... We do a lot of partnering - making sure to contact those who want to work with us. Any library activity is assignment-based. We look at the course objectives with the faculty member and match up the library session at the right time in the semester.

Professional Development

Librarians' effectiveness in sustainability efforts will be bolstered by professional development experiences. Question 5 of the survey asked about professional development events or training attended related to sustainability in the curriculum. Only 17% of respondents (19 out of 112) had participated in such activities, identifying on- and off-campus examples. Activities included the annual AASHE conference that encompassed a summer curriculum planning institute; community activities related to food security; a day-long workshop for faculty on integrating sustainability into the curriculum; green library webinars; Special Libraries Association workshops; the SUNY Sustainability Conference; and several institutes, workshops, and a fellows program offered through the librarian's home institution. Several librarians remarked that they would have liked to participate in such professional development activities but they lacked travel funds.

Sustainability and Library Associations: Then and Now

The interviews provided an opportunity to collect ideas for building sustainability initiatives within the library profession and related associations. When asked for ideas on how these groups could augment sustainability efforts, responses pointed to: ALA's TFOE and Social Responsibility Round Table; ACRL's Science and Technology Section; SLA's Environmental Resource Division; and the International Federation of Library Associations and Institutions (IFLA), to include an international perspective. A few suggested that librarians become more involved with AASHE. Others recommended discipline-specific avenues such as the American Society for Engineering Education's Sustainability Task Force of the Engineering Libraries Division. Recommendations for actions included: greening of more library conferences; a collection- or services-focused program for sustainability; and composing a professional goals document. Librarians called for more conference presentations, sharing of resources and experiences through professional networks such as LinkedIn, and using MERLOT to share learning objects. One librarian thought of using

Polleverywhere.com to solicit feedback about interests and needs. Another librarian recalled the Green Libraries list, a now-defunct forum and inventory of libraries' "green" actions, and recommended drawing from the past knowledge generated by the list. The need for an advocacy group was reflected in the comment that, "ALA is kind of an old organization.... Time to revise things and address issues that are more current. Sustainability could be one of these." One librarian wished an ALA or ACRL president (or candidate) would make sustainability their big initiative. Many commented that their state and regional associations are more effective places to discuss and present on sustainability initiatives. According to one librarian's forecast, "The organizations don't move ahead until there's a mass of people doing something. And there is this mass." Another librarian echoed this thought with his observation of the momentum that is building. "I think that it's [sustainability] just on the edge of catching fire, the whole concept. I think that the library profession has the knowledge and the access to all of this information – the foreknowledge. The profession ought to be the early folks onboard."

In 2012, I co-facilitated "Libraries for Sustainability," a four-part webinar series with Bonnie Smith (George A. Smathers Libraries, University of Florida) and Beth Filar Williams (University of North Carolina Greensboro Libraries).²⁴ The webinar was free and the format allowed anyone to join anywhere, eliminated the need to travel to a location (which is also greener!), and was a productive way to work toward a real goal. Sessions were recorded so others could review and participate asynchronously. Public, school, and academic librarians discussed their roles and potential for increased involvement through professional library organizations and other groups. The webinar allowed for sharing of sustainability practices (buildings, collection development, instruction, events, and collaborations). In the final session, a collective list of sustainability-related presentations, research and articles and identified potential areas for collaboration was compiled.

The most concrete outcome of the webinar series was recognition that a sustainability-related group needed to be formed within the ALA. As

a result of a series of open meetings – virtual and in person, an electronic petition to launch a new sustainability round table was circulated among ALA members. On January 28, 2013, the new Sustainability Round Table (SustainRT) was unanimously approved by ALA’s Committee on Organization at the midwinter conference in Seattle.²⁵ SustainRT’s mission is to, “...exchange ideas and opportunities regarding sustainability in order to move toward a more equitable, healthy and economically viable society. ...[T]o provide resources for the library community to support sustainability through curriculum development; collections; exhibits; events; advocacy, communication, library buildings and space design.”²⁶ Both ALA and non-ALA members network and share sustainability information on SustainRT’s web page, Facebook page, and the LinkedIn group, “Sustainability Librarians,” that now boasts 344 members.²⁷ Until officers are officially elected, I continue working with the interim SustainRT steering committee to solicit nominations, compose by-laws, and organize virtual and in-person meetings at ALA conferences that tap into the collective wisdom of the library community. Also notable is that the theme of the ACRL 2015 conference is “Creating Sustainable Community.”

SustainRT’s kickoff event will take place in Las Vegas at the ALA annual conference. A series of sustainability-related lightning talks from all types of libraries will be presented, followed by a networking session. Because strengthening social ties is vital in relationship building between librarians, the group will also meet up for a cultural walking tour and a shared meal.

Professional Development: Becoming Sustainability Studies Librarians

In 2013, I taught three sessions of *The Sustainability Movement on Campus: Forming a Library Action Plan for Engagement* through Library Juice Academy. The 36 participants (total) were mostly librarians, plus a few paraprofessionals and Library Science Master’s degree students. Through this online professional development experience, participants reflected on their sustainability-related values, leadership skills, and current level of engagement. Forum discussions

facilitated professional networking opportunities and an impassioned exchange of ideas. The main outcome was the creation of a tailored plan for action across their institutions, within their libraries and involving students and faculty. It is notable that the library school students are already envisioning the incorporation of sustainability studies into their library careers, portending the nearing emergence of library positions centered on sustainability studies. While attending the AASHE conference in 2011, I encountered many Sustainability Officers who were puzzled by the presence of librarians at a national sustainability conference. However, while attending again in 2013, similar encounters reflected a much clearer understanding of librarians’ role in this movement with comments such as, “Oh yes, we work very closely with our library.” Here is anecdotal evidence of a growing awareness of librarians as partners in the sustainability movement fueled by the diligent work of librarians who are stepping up to the table to share their expertise.

Looking Ahead

Toward the end of the interview, librarians were asked how they hope to shape their library careers and the future of “sustainability librarians” in academia. One librarian described a personal “gut feeling that this [sustainability] is red-hot stuff. This is a tremendous opportunity for librarians to be a part of it – synergy with faculty to launch a sustainability movement.” Many responses spoke to the need and desire to be more present and vocal, raising librarians’ profile through outreach, especially to faculty. As one librarian explained, “The best rewards come from just plugging along and making as many personal connections as possible.... I go to every research presentation and ask the person, ‘What can the library do for you?’ ” Other hopes included organizing more sustainability conferences and hosting more institutional repository materials for the Office of Sustainability. One librarian sees the librarian’s potential role in facilitating faculty members’ connections with each other and stated, “I would like to continue to get all the little fiefdoms on board in a similar way to how the library is doing it.” A long-time librarian said she is eager for the library to be formally



involved in the development of sustainability courses. She added, "I vow to stay on the [sustainability] committee and keep librarians involved and the information delivered."

Another long-time librarian reported that, "Focusing on sustainability has been a way to revitalize my career – it counts as service."

Contrasting this remark, was the oft-heard lament from a librarian who wished for more institutional support, adding, "It [sustainability] is not within our work portfolio. I wish it were."

This last comment speaks to the need for library administrators to understand the far-reaching aspects of sustainability, the demands on librarians, and the multitude of benefits that occur when librarians are engaged.

Sustainability Studies Librarians: Inquire Within

A review of the past three years shows the rapidly growing role of academic librarians in the sustainability movement. One important question prompted by this study is, "How will academic institutions match the proliferation of sustainability programs and co-curricular activities with the necessary library support for faculty and students?" As the ACUPCC continues to drive the integration of sustainability studies in the curriculum, creating librarian positions that designate sustainability studies as an area of responsibility becomes imperative. In 2013, librarians in the Marston Science Library at the George A. Smathers Libraries, University of Florida, proposed to library administrators that a Sustainability Librarian position be funded to support this multi-disciplinary field. A job description was developed in collaboration with librarians at other institutions who are involved in sustainability on their campus. This "innovative" position would support the sustainability curriculum, initiatives, and research areas as well as forge partnerships for related exhibits, speakers, committees, university-wide events, and provide national leadership with organizations such as AASHE.²⁸ The position has yet to be approved. As one interviewee said, "The thing that's cool about librarians – we're all about sharing information. We've been 'sustainable' for years. We're already half way there! We've been online early.

'Librarianship and sustainability' is a 'no brainer' -- to take that and make it more conscious. I bet there are going to be a lot more "sustainability librarians" in the world soon.

However, until such positions are approved and funded, librarians will need to carefully distribute their time, energy, and resources across disciplines. They must also communicate clearly and behave collaboratively in order to share the interdisciplinary weight and "wicked problem" of sustainability. Until these positions manifest, academic libraries run a serious risk of being an afterthought in the sustainability movement on their campus. Or not thought of at all.

Conclusion

The librarians in this study are clearly committed to shaping our next generation of leaders. Girding students with sustainability-related support will prepare students to be more effective agents of change in the academy, the workforce, and in their communities. Collaborating with faculty and Sustainability Officers will yield cumulative effects over time as librarians are perceived of and experienced as vibrant contributors to sustainability across the curriculum. Librarians need to develop specific approaches and work collaboratively in order to meet the increasing needs of sustainability courses and programs. To further these efforts, libraries need to consider sustainability studies as a designated liaison area or create dedicated positions to effectively serve the campus community. Librarians will also benefit from collaborating and coordinating sustainability efforts within their own profession so they may inspire and sustain one another as well as those they serve.

This article is intended, in part, to be a call to action. Based on the survey and interviews and the author's encounters with colleagues at library conferences and other professional development activities, it is evident that librarians are enthusiastic and supportive of this curricular shift. However, librarians need to continue demonstrating the added value of our contributions on sustainability committees and councils, as organizers of sustainability events

and other activities, in the classroom, and within the library profession.

Best practices include:

- Find out whether the President of your institution has signed the ACUPCC.
- Reach out to the Sustainability Manager on your campus. Offer an orientation to the library's sustainability resources.
- Inquire about joining a sustainability committee; share your unique perspective as a librarian.
- Contribute a library piece on sustainability resources to a campus publication, blog, or web site.
- Suggest your library create (or collaborate on) a guide for Earth Day or National Campus Sustainability Day.
- Recommend that your library implement a sustainability fund.
- Recommend that your library designate Sustainability Studies as a liaison area.
- Read widely on sustainability topics; enthusiastically share what you learn with library colleagues back at your institution.
- Take part in sustainability professional activities. If funding is an issue, seek out free webinars that you can participate in from your desktop.
- Join SustainRT or track their activities through Facebook and the website; join the LinkedIn group Sustainability Librarians (based on *A Sustainability Librarian's Manifesto: Your "Take Action" Checklist*)²⁹

Endnotes

¹ Association for the Advancement of Sustainability in Higher Education (AASHE), "Sustainability-Focused Academic Degree Programs." Accessed January 22, 2104. <http://www.aashe.org/resources/academic-programs>.

² Springshare, "Libguides Community." Accessed January 27, 2014. <http://libguides.com/community.php?m=i&ref=libguides.com>.

³ United Nations Economic Commission for Europe, "Sustainable Development-Concept

and Action." Accessed January 29, 2014. http://www.unece.org/oes/nutshell/2004-2005/focus_sustainable_development.html.

⁴ Andres R. Edwards, *The Sustainability Revolution: Portrait of a Paradigm Shift* (Gabriola Island, BC: New Society Publishers, 2005), 18.

⁵ Edwards, *Sustainability Revolution*, 20.

⁶ American College & University Presidents' Climate Commitment, "Text of the American College & University Presidents' Climate Commitment." Accessed January 29, 2014. <http://www.presidentsclimatecommitment.org/about/commitment>.

⁷ Ibid.

⁸ Umair Irfan, "More Colleges Adding 'Green' to School Colors," *New York Times* (August 16, 2011). Accessed January 23, 2014. <http://www.nytimes.com/cwire/2011/08/16/16climatewire-more-colleges-adding-green-to-school-colors-4232.html>.

⁹ AASHE, "Salaries and Status of Sustainability Staff in Higher Education." Accessed January 27, 2014. <http://www.aashe.org/publications/surveys/staffing-survey/2012>.

¹⁰ Sonya D. Hill, ed., "Learning Organizations" in *Encyclopedia of Management* (Detroit: Gale, 2012), 566-568.

¹¹ Amy Brunvard, Alison Regan, Joshua Lennart, Jessica Breiman, and Emily Bullough, "Building an Academic Library Collection to Support Sustainability," in *Focus on Educating for Sustainability: Toolkit for Academic Libraries* 2014, ed. Maria A. Jankowska (Sacramento: Library Juice Press, 2014), 109-100.

¹² Monika Antonelli, "The Green Library Movement: An Overview and Beyond," *Electronic Green Journal*, 27 (2008). Accessed January 29, 2014, <http://escholarship.org/uc/item/39d3v236>.

¹³ Anne M. Less, Beth Filar Williams, and Sarah Dorsey, "Librarians as Sustainability

Advocates, Educators and Entrepreneurs," in *The Entrepreneurial Librarian: Essays on the Infusion of Private-business Dynamism into Professional Service*, ed. Mary Krautter, Mary Beth Lock and Mary G. Scanlon (Jefferson, NC: McFarland, 2012).

¹⁴ Monika Antonelli, *Greening Libraries* (Sacramento: Library Juice Press, 2012). Accessed January 28, 2014.
<http://libraryjuicepress.com/greeninglibraries.php>.

¹⁵ Maria A. Jankowska, *Focus on Educating for Sustainability: Toolkit for Academic Libraries* (Sacramento: Library Juice Press, 2014). Accessed January 28, 2014.
<http://libraryjuicepress.com/sustainability-toolkit.php>.

¹⁶ Madeleine Charney and Carol Connare, "Sustainability Fund Fuels Activities at the University of Massachusetts Amherst Libraries," *CLS Newsletter*, 28 (Fall 2012), 4-5, Accessed January 28, 2014.
http://www.ala.org/acrl/sites/ala.org/acrl/files/content/aboutacrl/directoryofleadership/sections/cls/clswebsite/newsletters/cls_fall2012.pdf.

¹⁷ "Gale Cengage Learning Financial Development Award Recipient Named," *ALA News* (March 14, 2013), Accessed January 27, 2014.
<http://www.ala.org/news/press-releases/2013/03/gale-cengage-learning-financial-development-award-recipient-named>

¹⁸ Madeleine Charney, "Sustainability Curriculum Initiative," Accessed April 3, 2014.
<http://guides.library.umass.edu/content.php?pid=17059&sid=4758992>

¹⁹ Jeffery A. Knapp, "'Plugging the 'Whole': Librarians as Interdisciplinary Facilitators," *Library Review* 61, no. 3 (2012): 203, doi [10.1108/00242531211259328](https://doi.org/10.1108/00242531211259328).

²⁰ Ibid, 205

²¹ Madeleine Charney and Katie Campbell Nelson, "Embedded: A Sustainability Studies Librarian Finds a New Home," Accessed Jan-

uary 28, 2014.

http://works.bepress.com/charney_madeleine/58/.

²² Slaven Zivkovic, CEO and founder of Springshare, e-mail message to author, January 6, 2014.

²³ Julie Biando Edwards, Melissa S. Robinson, and Kelley Rae Unger, *Transforming Libraries, Building Communities: The Community-Centered Library* (Toronto: Scarecrow Press, 2013), 104.

²⁴ Madeleine Charney, Bonnie Smith, and Beth Filar Williams, "Libraries for Sustainability," 2012. Accessed January 28, 2014.
http://works.bepress.com/charney_madeleine/52/.

²⁵ American Library Association (ALA), Committee on Organization, "Report to Council Midwinter Meeting 2013," Accessed January 29, 2014.
http://www.ala.org/aboutala/sites/ala.org/aboutala/files/content/governance/council/council_agendas/2013mw_an_agendas/cd_27_coo%20rpt.doc.pdf.

²⁶ ALA, "Sustainability Round Table," Accessed January 28, 2014.
<http://www.ala.org/sustainrt/home>.

²⁷ LinkedIn, "Sustainability Librarians," Accessed January 28, 2014.
<http://www.linkedin.com/groups/Sustainability-Librarians-3928605>.

²⁸ Bonnie Smith, July 2013, post of Sustainability Librarian job description on LinkedIn, Sustainability Librarians. Accessed January 29, 2014.
<http://www.linkedin.com/groups/Sustainability-Librarians-3928605>

²⁹ Madeleine Charney, "A Sustainability Librarian's Manifesto: Your Take Action Checklist," 2012. Accessed April 4, 2014.
http://works.bepress.com/charney_madeleine/55/

Appendix I: Survey questions:

1. Please tell me your job title.
2. What is the name of your institution and the approximate number of full-time equivalent (FTE) students?
3. Have you created or co-created any online research guides on sustainability-related topics? None/1-3/ 4-6/ more than 6
4. Please specify the topics of your research guides below. Choose as many as are relevant. Air Quality/ Biodiversity/ Climate Change/ Community Building/ Composting/ Corporate Social Responsibility/ Ecovillages/ Endangered Species/ Environmental Health/ Food Access/ Food Security/ LEED/ Local Food/ Permaculture/ Recycling/ Renewable Energy/ Smart Growth/ Social Entrepreneurship/ Social Justice/ Sustainability (general)/ Sustainability Science/ Sustainable Agriculture/ Sustainable Building & Design/ Sustainable Development (Rural)/ Sustainable Development (Urban)/ Sustainable Economics/ Sustainable Engineering/ Sustainable Food Systems/ Sustainable Landscape Design/ Sustainable Law/Policy/ Sustainable Libraries/ Sustainable Lifestyle/Health/ Sustainable Regional Planning/ Sustainable Technology/ Sustainable Transportation/ Waste Reduction/ Water Conservation/ Other (please specify)
5. Please list any professional development events or trainings you attended (or plan to attend) which relate to sustainability in the curriculum. For example, events hosted by Association for the Advancement of Sustainability in Higher Education (AASHE).
6. Is there an "Office of Sustainability" (or similarly named entity) located on or affiliated with your campus? Yes/ No/ Not sure
7. If you answered "Yes" to Question 6, are there links to your Library's resources on the web site of the "Office of Sustainability"? Yes/ No/ Not sure
8. If you answered "Yes" to Question 6, please briefly describe any curriculum-related connections or communications that you or your Library has with the "Office of Sustainability" or their staff.
9. Please list any other campus committees, councils or other groups (past or present) in which you are involved that relate to sustainability in the curriculum.
10. Would you be willing to participate in a 10-minute telephone interview to follow up on these survey questions? Yes/ No

Appendix II: Interview questions (conducted June 6, 2011 through August 12, 2011)

1. How do you define “sustainability” with regard to your work in the library or within your professional outlook?
2. Do you interact with any specific sustainability courses, programs, degrees, certificates on your campus?
3. Can you identify any barriers to communicating/interacting with others (faculty, students, administrators, colleagues) and how they might be dissolved?
4. Do you think it would be useful to have access to a compilation of Sustainability research guides created by academic librarians?
5. What is your (or your Library’s) relationship with the “Office of Sustainability” on your campus? What would you see as an improvement in this connection with regard to the curriculum?
6. Do you have suggestions for building sustainability initiatives within our library associations?
7. What more would you like to be doing to engage with sustainability at your Library? On your campus? In academia? In other words, what is your vision of engagement for “sustainability librarians” in academia?
8. What inspires you most about this work?
9. What do you think is another important question to be asking ourselves right now on this topic?