

Catherine A. Blair. Creating a Green Library Website and Directory: A Discussion of the Process and Results. A Master's Project for the M.S. in L.S degree. April, 2010. 15 pages. Advisor: Brian Sturm

This paper describes the process used to create a website containing information relevant to the green library movement, most notably a directory of green libraries. It includes discussion of the information-seeking methods used to locate data for the website, the formats used to present that information, and the website's future.

The website can be accessed via the following address:

<http://maps.google.com/maps/ms?hl=en&ie=UTF8&source=embed&msa=0&msid=104188640014842639355.000466b3998d3a5724bac&ll=15.411319,45.922852&spn=27.58122,34.848633&z=5>

Headings:

Websites -- Design

Environmental movement

Librarians -- Social responsibilities

Architecture and building -- Internet resources

CREATING A GREEN LIBRARY WEBSITE AND DIRECTORY: A DISCUSSION  
OF THE PROCESS AND RESULTS

by  
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Approved by

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## **Introduction**

The interconnected topics of “sustainability” and “green libraries” have received a great deal of coverage in recent years in publications targeted toward American librarians. Sustainability can be defined as the capacity to “[meet] the needs of the present without compromising the ability of future generations to meet their own needs” (Le Ber & Gregory, 2004). It has economic, social, and environmental aspects (Jankowska & Marcum, in press). While the term “green library” is often used specifically to describe a library building that has received Leadership in Energy and Environmental Design (LEED) certification from the United States Green Building Council (USGBC), it can also refer to a library that is becoming more environmentally sustainable in significant ways, whether by using nontoxic cleaning supplies, reducing energy use, or collecting and promoting materials with environmental themes.

When I first started this project, I wanted to create a comprehensive guide to every green library and every piece of information relevant to librarians wanting to green their libraries.

I’d have plenty of time for that, right?

Unfortunately for my ambitions - but fortunately for those of us who want to see the green library movement growing, and for those of us who prefer to get our information in ongoing, multi-sourced overdoses – the amount of information available on the topic of green libraries, and the number of libraries trying to “go green”, is growing day by day. A search of the *Library Literature & Information Science* database

for articles on topics related to environmental sustainability returns more than two dozen results from 2008 alone. Articles in *Library Journal*, *American Libraries*, and elsewhere offer tips on becoming greener and call attention to library buildings with green features. Seminars offer librarians tips on implementing green practices (see, for example, InfoPeople Project 2009). There are green library weblogs. There is a green library Facebook group, created by Gerry McKiernan of Iowa State University, that has attracted more than six hundred members since its creation in October 2008. There are even multiple “green library directories” available online.

Thus, I ended up focusing on one aspect of my project, the aspect that made it unique: an interactive Google Map that provided a visual representation of the data it contained. The other parts of my website contain important information, and when I thought them up they seemed new to me; but in the course of my research I discovered that they had already been written about many times and in many places - most recently, pertinently, and comprehensively in *How Green Is My Library?* (McBane Mulford & Himmel, 2010).

In this paper, I discuss the questions I struggled with while creating my website as well as the conclusions I reached over the course of my research.

## **Questions Considered**

Although I will discuss these questions in a linear fashion, I did not arrive at my answers to them in a linear fashion. In fact, I revisited possible answers to each question many times over the course of the project.

### *1. Who is this site for?*

Ultimately, I decided that I wanted to reach the broadest audience possible. I wanted my site to be useful not only to librarians who were just beginning to learn about environmental sustainability, but also seasoned “green” librarians looking for new ideas - and not only to librarians, but also to environmentalists interested in libraries and library patrons interested in environmental sustainability.

Because I was aiming for a general audience rather than a specialized one, my content focused more on generalities than specific technical information. I provided definitions not only for the terms that might stump some librarians - such as “LEED” - but also terms like “academic library” and “school library”, which could be confusing to non-librarians. At the same time, I included links to pages with technical information that more advanced users might find helpful.

### *2. How will I define my terms?*

In the introduction to this paper, I wrote that the term “green library” can mean a library striving to make its operations and services more environmentally sustainable, or it can refer to a library with a “green building” (in the United States, often LEED certified or built to LEED specifications). For my project, I had to decide what criteria I would use to identify libraries for inclusion in the green libraries directory. “LEED certified” would have been the easiest criterion to use, since it involved no judgment on my part. But limiting my directory to LEED certified buildings would have excluded green libraries in countries that use other rating systems for environmental certification. It would also have excluded libraries that, while building “green”, were not able to spend the extra time and money required to obtain certification. And it would have excluded

libraries that have not carried out substantial building or renovation projects in recent years, but whose operations, collections, and programming emphasize environmental sustainability. No, using LEED certification as the only criterion was far too restrictive. But if I was going to use broader criteria, where would I draw the line between green and not-green? Would a library qualify if it had set up a few more recycling bins, changed to energy-efficient light bulbs, or offered an hour-long program on organic gardening? I wanted to include only libraries that had made a substantial commitment to going green. In the end, “substantial” became a judgment call. In addition to the clear-cut cases of libraries with LEED certification, I tended to include libraries with green roofs or solar panels, libraries that had received public recognition for green facilities or operations, and libraries with a history of offering multi-part, long-term green programs.

I also went beyond the existing online directories to include libraries that were not located in stand-alone facilities. School libraries, museum libraries, and other special libraries can all be located in green buildings and can all offer green collections and programming. Hundreds of libraries would meet my criteria for inclusion in the directory, and their numbers were growing day by day. There was no way I could claim to provide a comprehensive list.

Excluding school and special libraries to focus on public and academic libraries would have made my project easier. But I wanted inclusive, not easy. If I couldn't be comprehensive, I wanted to be interesting, while also being as comprehensive as possible given my time and resources. Thus, I tried to include examples of green libraries in as many U.S. states and Canadian provinces as possible; I looked for green libraries outside North America; and I included libraries serving specialized populations. If I could

confirm that a green building contained a collection that it referred to as a library, that library was included in the directory.

*3. What information about green libraries should my website include?*

Because the directory was the most original part of my project, I chose to offer only basic information about green libraries on the other parts of my website so that I would have time to focus on identifying libraries for the directory. But what information about those libraries should the directory include? Would users want substantial annotations like those offered on Monika Antonelli's Green Libraries site (Antonelli 2009)? Would a bare-bones list be enough?

I imagined myself as a user. Any kind of user would want to know where the libraries were located, because he or she would want to see whether any of them were located nearby, and he or she would be interested in seeing how widespread the green library phenomenon was. (In other words, I thought users would be most interested in the libraries geographically closest to them *and* the libraries geographically furthest from them.) Users would want to know why I had selected the library for inclusion, so the directory would have to include basic information about the library's LEED certification status and/or most prominent green features. Librarians would want to know what kind of a library they were looking at - public, academic, etc. - so that they could make comparisons that were relevant to their own institutions. Because many of my users would not be experts in the field, annotations with technical information would be less useful to them. (Besides, time limitations permitted me to include many libraries, or to fully annotate a few libraries - but not both.) Still, my directory should include links to

relevant technical information, both as a service to the more expert users and as a way to cite my sources.

That left me with a site that remained mostly static. Fortunately, I was able to create an RSS feed that would allow visitors to the site to see the most recent updates posted in three green-library blogs as well as the U.S. Green Building Council's new collection of green-building websites on Delicious. Voilà - dynamic content, and a convenient one-stop visit for users who would otherwise have had to visit multiple sites to check for updates.

#### *4. Where and how should I look for information?*

The existing web directories of green libraries seem to have gathered most of their information from personal knowledge and information volunteered by other librarians. Rather than waiting for information to come to me, I went out and looked for it.

The source I relied on most was the United States Green Building Council's directory of LEED-certified building projects. I began by searching for the word "library" in the names of certified projects. Later, I expanded my search to include the words "museum", "school", and "archives" as well as the partial words "muse" and "libr". The fact that a search for "librar" returned one more result than a search for "library" highlighted a problem with the directory: it relied on the information supplied on participants' application forms, and it allowed limited space for description. Thus, lengthy project names were partially cut off, and projects involving library facilities might have descriptions that made no indication of that fact. I ended up scanning lists of *all* the certified projects in "underrepresented" states like Nebraska and Delaware to ensure that I had not overlooked a "hidden" library. If I turned up the name of a school



or museum, I searched for any indication that the school or museum contained a library. In several cases, I e-mailed or called organizations to obtain this information.

I came across other useful sources of information while seeking further details about LEED-certified projects. These included the Green Building Council websites of countries outside the U.S.; directories of buildings with green roofs; and BuildingGreen LLC's case studies of high-performance buildings. *Library Journal's* archives turned up some mentions of green libraries I had not found elsewhere, as did *American Libraries'* annual Design Showcase.

Serendipity also played a role. For example, I learned about the Austin Public Library's Leaf for a Leaf program when a fellow student pulled up the APL's website as part of an unrelated discussion, and I discovered about the Chicago Public Library's green programming while trying to find out more about the reading garden in a Chicago branch library.

My favorite part of the project was identifying new libraries for my directory. Finding a green library in Saudi Arabia or the Yukon - or even North Dakota - made me feel like a stamp collector who's just found a rare misprint or a birdwatcher who's just seen a new bird for her "life list". I spent so much time searching for more libraries that I had limited time left to actually add them to the directory. My information-seeking methods fit Marcia Bates's berrypicking model - I wandered from patch of information to patch of information, then circled back to revisit particularly fruitful areas - but if I was picking berries, then I was also continually emptying my container at home and returning to the berry field without ever stopping to make the berries into pie (Bates, 1991).

### *5. How should I present my findings?*

This question involved issues of organization, categorization, and technical presentation.

I had to decide how to organize my list of libraries. Other online directories listed their libraries in alphabetical order. I felt that users would be able to locate libraries more easily if they were listed geographically, since anyone who knew the name of a library would probably know where it was located, while less-informed browsers would care more about a library's location than its name. On the other hand, I organized the Google Maps version of my list alphabetically, because I knew of no way to subdivide the map navigation bar by state.

I also had to decide how to categorize each library. In most cases, the category was obvious - public, academic, K-12 school. I distinguished some public libraries as "federal" based on their main funding source (a national government body) and targeted user base (federal employees as well as the general public). But how would I categorize a library in a nonprofit organization? I thought the term "corporate library" would mislead many users who think of Wall Street when they see the word "corporate". I tried the more general term "business library", but that felt misleading, too. In the end, I settled on the term "special library" as the most acceptable descriptor for the libraries that fell under "other", even though my use of that term differed somewhat from its use in the library profession in general. I also decided that in determining a library's categorization, a library's user base should weigh more heavily than its funding source. Thus, the North Carolina Botanical Garden's library, which is funded by the University of North Carolina at Chapel Hill, was categorized as a "special" library rather than an academic library, as

was the publicly-funded Chicago Center for Green Technology. As with all forms of cataloging, some cases come down to cataloger's judgment.

As for the technical aspects of the website's presentation, I worked with a number of programs, including Adobe Dreamweaver, Adobe Illustrator, and Adobe Fireworks, to try to create a site that was visually attractive, easily understood, and easily navigated. I used cascading style sheets to ensure uniformity of presentation. I created icons to make it easier for viewers scanning a page to see how each library was categorized and what its LEED certification status was. (All icons included alt tags to make them accessible to visitors using screen readers and other assistive technology.)

I used Google Maps to create a map of green libraries worldwide. Using Google Maps had a number of benefits. First, and most importantly, the code was already written; I did not have to create my own image map and markers. Google Maps also offered zooming capabilities and satellite views, so I could position place markers over the precise buildings they represented. On the other hand, this positioning was very time-consuming; if I had not been working with such a precise mapping program, I could have spent more time on other aspects of the website. I also worry that I have ceded control of my map-related data to Google without even receiving a backup of the data to store on my own hard drive. What if Google decides to restrict my access to the information I created? What if it simply lost the data? What recourse would I have?

While trying to pinpoint libraries' physical locations, I grew to appreciate the dangers posed by a "monoculture" internet environment – that is, an environment in which everyone relies on the same source for information. If a library's "driving directions" link simply took me to the Google Map I was already looking at, and that

Google Map placed the library's address some distance away from the actual library, I was still as lost as before. (And in many cases, Google *did* place the marker far from the library itself, especially in more rural areas.) Hand-drawn maps and written driving directions that included street names and distances were much more helpful, even when they were not to scale. Based on my experience with this project, I will work to ensure that any libraries I work at in the future provide at least rudimentary directions of their own rather than outsourcing their mapping to Google.

*6. What more can be done with this project?*

A website like this one is never completed. More libraries are being added to the USGBC database and other sources all the time. What could I do with more time and resources? In addition to monitoring and rechecking my existing sources, I am considering posting messages to library-related listservs asking for information on any libraries my sources might have omitted. I will also want to inform other green librarians out there of the existence of my website and exchange links with them. I will need to find a permanent host for the website within the next year, before my UNC server space is deleted. Finally, on the technical side of things, I would like to spend more time testing the site to ensure that it meets accessibility standards.

## **Conclusion**

What did I learn from this project?

I learned how to create RSS feeds, how to create Google Maps, and how to use Adobe Illustrator and Adobe Fireworks. I learned to appreciate distinctive building architecture (it's easier to spot in a satellite photo), and I better understood how important

it is that old, diverse sources of information not be discarded entirely when a shiny new source of information comes along, even if that shiny new source is offering satellite photos and street-level views. I started to think about the possible ways in which Google Maps could be used as a teaching tool in schools looking for an alternative to geography worksheets.

In addition to acquiring new skills and ways of working with information, I gained a deeper understanding of my habitual methods of working with information. I always want to be comprehensive, even when I know it is impossible. I will search tenaciously for information; but I do not always choose efficient search methods, nor am I willing to let go of the search for information in order to process the information I have already collected.

Some of the information I encountered was discouraging. Sidwell Friends Middle School, for instance, is a model green building, with the platinum-level LEED certification to prove it. It even generates some of its own electricity through rooftop solar panels. But in 2009, the electricity that the school's solar panels produced amounted to less than three percent of the electricity the school consumed (Lucid Design Group, 2010). The school is consuming resources much faster than it can replace them. And yet Sidwell Friends is still light-years ahead of most libraries, judging by the fact that American Libraries is still publishing the same old articles about "easy ways to go green" and "ten eco-friendly habits for your library". How many times do librarians have to be told to use recycling bins and turn off the lights when we go home for the night? Even the greenest of green libraries still has a long way to go to reach the goal of

complete environmental sustainability, if that goal is even attainable; meanwhile, most libraries have barely started the journey.

The ultimate goal of my website is not just to advertise the existence of green libraries, but to motivate visitors to the site into making their own libraries greener. If one person can't do it all, at least she can try to do something.

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