WordPress for Library 2.0 and Beyond

A Smart Libraries Newsletter Special Edition

By Joshua Dodson and Laura Slavin

Letter from the Editor

At TechSource, we're committed to helping you stay on top of the technology that can help your library run most efficiently. In addition to giving you the latest news from the library automation industry, we strive to provide information that can help librarians learn to work directly with software, web applications and other tools that can make library technology more efficient, user-friendly and cost-effective.

To that end, we're happy to present *WordPress for Library 2.0 and Beyond*. This special edition is designed to help librarians become familiar with Word-Press, a free, easy-to-use and very powerful tool. While primarily known as a blogging platform, WordPress has the capability to serve as a full-fledged management tool for a library's web presence.

Our authors for this special issue, Laura Slavin and Joshua Dodson, know because they've done it. Joshua and Laura are both on the staff at Lincoln Memorial University in Tennessee, serving as Technical Services Technician/Web Assistant and Technical Services Librarian, respectively. They have built a fully functional web presence for their library using WordPress, and have given several presentations for librarians on how they can save money and advance their web presence using this versatile tool.

We hope this special edition will be helpful and informative.

Sincerely,

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What WordPress Can Do for You

In today's information environment, libraries must do everything possible to provide the best service at the lowest price. A polished, well-developed website is essential, but library staff may not have the technical knowledge, funds or time to develop and maintain a website. In this special edition of *Smart Libraries Newsletter,* we will present WordPress as an affordable option for a library web presence. WordPress will be discussed as a multi-faceted, customizable content management system for libraries.

How can WordPress be Beneficial to Libraries?

In these tough economic times, libraries require affordable and creative options for website design and management. WordPress provides a variety of options for libraries to develop and maintain a web presence. It can serve as a content management system and a blogging tool, and can be used as a web application framework. Since WordPress is open source software, it is also free to download, use, and modify. With a small amount of preparation, WordPress can be installed very quickly. It is simple to use and easy to modify. WordPress is highly customizable, and can be adjusted to fit the size and skill level of any staff. WordPress allows administrators to set up different levels of accessibility so that librarians of all skill levels can creatively participate in the modification of their library's web content and design specifications. Librarians need the ability to make large amounts of content available to their patrons. WordPress acts as a content management system that makes it easy to manage and access information. WordPress offers a full range of options that

can immediately be utilized by libraries upon installation. The following included components can quickly turn a boring library Website into a dynamic Library 2.0 site that engages the users:

Blogging: WordPress was originally built to be a blogging platform. The capabilities of WordPress have been extended significantly since its original creation, but blogging is still very much at the heart of WordPress. WordPress makes it easy to write sequential blog posts about events occurring at the library.

Bookmarking: WordPress has a bookmarking system that makes it easy to share interesting links with site visitors. This functionality can be compared to services like delicious.com, but built into a WordPress installation. You can save a bookmark to a website which would then link back to your site. You could also use bookmarks to link to specific sections of your site. For instance, you may want to highlight posts tagged "New Books," so you can create a link to the "New Books" tag and add it as a bookmark. You can create multiple bookmark sections, making it possible to display links to other Websites as well as featured sections of your own Website.

Static/Dynamic Pages: It is important to have options when choosing a content management system. WordPress offers choices of either static pages (called "Pages" in the WordPress Dashboard) that do not change, or dynamic pages that display "Posts" in various ways. Posts are displayed through the use of tags, categories, and authors through the primary blog function and several other ways.

SEO Friendly Out of the Box: If search engines can't find your website, neither will your users. The creators of WordPress have made Search Engine Optimization (SEO) a priority. This allows search engines like Google to find your website very easily. WordPress even goes so far as to send a ping, or notification, to search engines when the website is updated. This allows for the fresh content to always be accessible to users as they search for you.

Tags and Categories: With the help of metadata and organizational options like Tags and Categories, a website is no longer limited to linear organization. By utilizing the tags and categories in WordPress, a library can organize the content of their website by multiple themes without having to rekey the information. While the blog function initially was for sequential posts, tags and categories mean that blogging doesn't have to rely on chronological organization; it can also be organized by category. Posts can be arranged by topic in multiple formats by using categories and tags simultaneously.

Search: WordPress comes with its own search capabilities. This enables the user to find information on the site that is relevant to his or her immediate needs. Think of a personalized Google that only searches the library site. While tags and categories make the job of assigning metadata to content much easier, search eliminates the worries of whether or not you remembered to add all of the relevant tags. The search function will search all of the content within a page as well as the tags and categories, giving users a rich, dynamic way of finding exactly what they need on your site.

RSS feeds: RSS feeds allow users to subscribe to all of the new content that is being published through the website.

WordPress has added the option to create RSS feeds for specific categories, tags, users, searches, or just about any way that you could imagine dividing up a Website. WordPress is incredibly versatile and the RSS feed is one of the many ways that it shines. For example, a user can subscribe to a feed of the blog posts written by "Mrs. Librarian A" within the category of "New Books" and read all of them within Google Reader or another RSS reader. See Plymouth State University Library for an example of a prominent RSS feed link (http://library.plymouth.edu).

How We Have Used WordPress at LMU

The librarians and staff at Lincoln Memorial University Carnegie-Vincent Library (http://library.lmunet.edu) transformed their library website using WordPress. They felt strongly that the website needed a major overhaul, largely because it was becoming cumbersome and extremely difficult to manage. Technical staff found themselves repeating the same changes multiple times. This repetition was both time consuming and error-prone. The library decided to customize the website using WordPress and create a dynamic environment. Now,

Carnegie-Vincent Library is powered by WordPress.

one change to the database list remains current with a single edit, even if a link appears multiple times. The library continues to incorporate Web 2.0 technologies and dynamic content.

One of the selling points for using WordPress at Carnegie-Vincent Library was the huge amount of training available for the product. WordPress.tv is an excellent option for training staff on how to use WordPress. Visit WordPress.tv and click on the "How To" tab. Here you will find a variety of video tutorials that help both beginners and experts understand and apply the functionality of their WordPress installation.

Plug-ins

When it comes to their web presence, libraries have special concerns and requirements. Library websites must be customizable, searchable, and current. In the second portion of this Special Edition, we'll discuss the customizable nature of WordPress, focusing on features that are beneficial to libraries. One of the best features of WordPress is its extensibility and adaptability. By using plug-ins you can easily extend the blogging capabilities of WordPress into a solution for any number of projects.

Search Engine Optimization (SEO)

A simple search for SEO in the WordPress plug-in directory (http://WordPress.org/extend/plug-ins/) will yield quite a few results, with each claiming that it will do wonders for getting your site into search engine results. All-in-One SEO Pack (http://wordpress.org/extend/plug-ins/all-in-one-seo-pack/) and HeadSpace2 SEO (http://wordpress.org/extend/plug-ins/headspace2/) are two plug-ins that sufficiently modify the on-

page parameters that search engines (specifically Google) look for to determine relevancy. If you don't like the way either of these work, there are dozens of other SEO plug-ins you can try. This does not mean that these plug-ins will do the work of research and networking for you, they merely provide a means by which it is easier to add the appropriate information to your pages and posts.

Sitemaps and Robots

XML Google Sitemaps (http://wordpress.org/extend/plug-ins/google-sitemap-generator/) is an example of a plug-in that takes the hard work out of determining which pages to index on your site. It will create a version of your sitemap that is written in XML, which will allow robots to see the structure of your site. While you will want to emphasize something like a mission statement page, you may not want to focus on another page when it comes to being indexed in search engines. XML Google Sitemaps and the many plug-ins like it can make this process very easy.
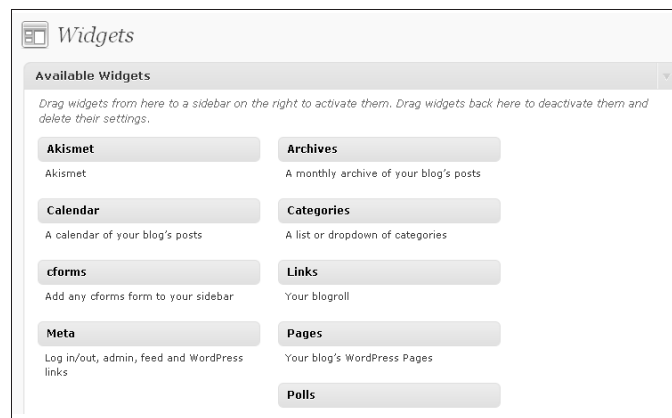
Social Networking and Bookmarking

To get people to visit your website, you need to have fresh content, optimize for search engines, and publicize your site. We already looked at some SEO plug-ins. For these, you have to write your own content, but there are quite a few other plug-ins that will help you get the word out about your site. Two great examples of plug-ins that will help with social networking are Sociable (http://wordpress.org/extend/plug-ins/sociable/) and ShareThis (http://wordpress.org/extend/plug-ins/share-this/). They encourage your readers to further share the article or news item that they are reading with other people. These plug-ins provide links to popular social bookmarking or networking services such as Delicious, Digg, Twitter, StumbleUpon, Reddit, Facebook, and many others.

There are plug-ins that will allow you to take the first step in initiating communication on several of the social networking sites. Twitter Tools (http://wordpress.org/extend/plug-ins/twitter-tools/), for instance, will allow you to post a tweet to your twitter account every time you create a new post. There are similar plug-ins that will do the same thing for your Facebook status. While this automation is an excellent way to quickly post updates, it is still important to maintain a human presence on these sites if you want your networking to really benefit your website.

Connecting to Patrons with Chat Reference

If you have tried chat reference and have found that it was helpful for your patrons, or would like to begin providing this

Widgets allow you to reposition the sections of your sidebar or other widgetized areas.

service to your library users, WordPress provides several ways to easily add a chat option to your site. Many libraries have already started to use chat reference with WordPress. There are several plug-ins that you can use to achieve this, but if you use a theme (which we will talk about later) that uses a widgetized sidebar area, WordPress will allow you to place a widget in the sidebar where you can paste a block of HTML to display the desired content. In this case the content will be a chat widget. Services such as Meebo (http://www.meebo.com/) and Google Talk (http://www.google.com/talk/) provide a widget in HTML format that you can paste on your website. In WordPress, pasting the HTML in the sidebar widget is one of the quickest ways to enable chat. Some themes have multiple widgetized sidebars so that you can specify exactly where on the page you would like the widgets to be displayed.

Scriblio, the WordPress OPAC

There is no reason why you need to use WordPress exclusively for its blogging capabilities. There has been an effort to use WordPress as a complete library OPAC. Plymouth State University (http://www.plymouth.edu/) has undertaken this project in the form of Scriblio (http://about.scriblio.net/), a WordPress plug-in that transforms a WordPress installation into an OPAC, complete with all the essential metadata fields plus a few additional perks such as cover photos and tags. We will explain some other options for using Scriblio in the next section.

Exporting Records with unAPI

As a savvy researcher, you may have tried out the Zotero Firefox plug-in that allows you to save research files and citation information directly in the Firefox browser. If you use Zot-

ero, you will notice that when you are at a page that contains pre-coded exportable data (for citations, etc.), it will often display a Zotero link in your address bar. Have you ever wondered how the website makes the data accessible in that way? unAPI (http://lackoftalent.org/michael/blog/unapi-wordpress-plug-in/) is a plug-in that assists in specifying certain exportable data such as author name, book title, and call number. Used in conjunction with plug-ins such as Scriblio, unAPI can help you set up the proper export information. This will require modification of the PHP files, so only use this if and when you are comfortable working with the code.

Make Your Own Social Network

Do you enjoy using Facebook, but would like more customization capabilities, and only want a network for your library staff and patrons? BuddyPress (http://buddypress.org/) is a WordPress MU plug-in that can provide just that. You can set up your own network of users and groups. The users can create their own separate blogs and send notification information to other specific users or globally to all users if they are administrators. This also has important benefits as an internal staff communications tool. It is possible to keep groups private if you desire.

Note that BuddyPress requires WordPress MU, which is different than a standard WordPress installation. They are similar in many ways, and WordPress MU is still open source and free to use.

Mingle (http://WordPress.org/extend/plug-ins/mingle/) is another option for creating your own social network, only it uses the standard WordPress installation. You will not need to reinstall WordPress since you can use it with your preexisting installation.

Other Uses and Future Possibilities

WordPress is truly a content management system. It can manage multiple types of content and can be used in ways that go far beyond its original intention. As we mentioned in Part 2 of this special edition, using plug-ins is one way to do this. Now we will discuss using themes to manage content in unique ways.

Themes are what allow you to display content to users. It is the "skin" for your site. They allow you to create custom user experiences that are tailored to your library's purposes. To edit and create themes, you must have at least some knowledge of PHP, HTML (often XHTML), and CSS. The PHP needed for theme development mostly involves WordPress-specific functions, so extensive knowledge is not necessary. Colby Sawyer College's Archives and Special Collections make excellent use of a WordPress theme (http://archives.colby-sawyer.edu/).

More important than knowing PHP for most purposes is the knowledge of CSS. If you do not know PHP and do not have the time to learn PHP, there are plenty of themes available that can do nearly everything that you would like in a website and only require CSS for customization. If you have seen the amazing customization capabilities of CSS at work in sites like CSS Zen Garden (http://www.csszengarden.com/), then you have an idea of what can be done with pre-determined markup with IDs and Classes.

The following themes were developed to make it easy on the user to style a website using only CSS.

Sandbox

Sandbox (http://www.plaintxt.org/themes/sandbox/) was developed specifically for the purpose of allowing people with little or no PHP experience to customize the look and feel of their theme. It has many CSS selectors available, so you can create a different look for every single page if you choose to. Sandbox makes it possible to alter the appearance of specific pages like blogs, single posts, pages, specific categories, author pages or tag pages. It offers fine-tuned customization capabilities. Sandbox also offers various machine-readable microformats for further extensibility.

Thematic

Thematic (http://themeshaper.com/thematic/) makes use of features similar to those used by Sandbox, but expands upon them. Thematic is available pre-packaged with SEO features, multiple widget areas, and a grid-based design with multiple layout options. Thematic is an excellent place to start if you want to customize your library's theme with very little work.

Other Themes

The WordPress Themes Directory (http://WordPress.org/extend/themes/) is an excellent place to start searching for themes that will fit your library's needs. If you find a theme that

you enjoy but needs to be changed to meet your criteria, try to modify the CSS yourself if you are comfortable. If you are not comfortable modifying the theme yourself, there are many programmers available who will either modify an existing theme for a small fee or create an entirely new customized theme for a little more money.
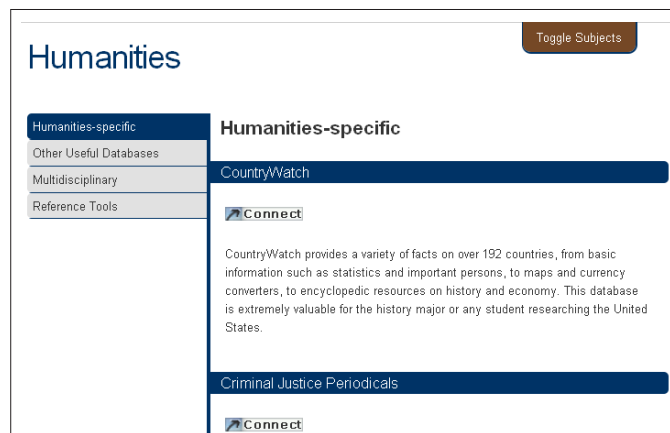
Subject Guides

Subject guides are an excellent way to give patrons specialized content. WordPress creates subject guides remarkably well. One example of using WordPress to create a subject guide is to create bookmark categories and include the list of links within the category on specific pages (Biology-specific database links, for example). Another way would be to create new posts for every item that is to be displayed within a specific subject area, giving the post a specific category or tag that is related to the subject area. After each post has been created, a simple WP_Query function can be implemented to display only the posts within that category. Our library uses the second method. To simplify the process, add the following code to your theme's functions.php file:

```php
<?php function subject_panel_cat($atts, $content =
null) {
  extract(shortcode_atts(array(
    "num" => '1000',
    "cat" => ''
  ), $atts));
  $my_query = new WP_Query('category_name='.$cat.'&
  orderby=title&order=asc&showposts='.$num.'');
  while ($my_query->have_posts()) : $my_query->the_
  post();
  $do_not_duplicate = $post->ID; ?>
<div class="title <?php foreach((get_the_category
())as $category) { echo $category->cat_name . ' ';
} ?>"><?php the_title(); ?></div>
<div class="content"><?php the_content(); ?></div>
    <?php endwhile;
  }
  add_shortcode("panelcat", "subject_panel_cat"); ?>
```

After that function has been added to the file, use the following short code (WordPress-specific code that simplifies complex functions) in one of your pages, replacing "Category Name Here" with the relevant category for the subject area you wish to display.

[**panelcat cat="Category Name Here"**]

Subject guides at Carnegie-Vincent Library

This short code can be added multiple times to a page, which will allow you to pull information from several categories.

With a small amount of JavaScript and CSS, you can further modify this to be a clean-looking subject guide. For examples of how we use it at our library, look at the database section of the Carnegie-Vincent Library website (http://library.lmunet.edu/databases).

Online Public Access Catalog (OPAC)

We've already mentioned Scriblio, but it warrants a bit more detail. The metadata schema that is possible with Scriblio makes WordPress into a remarkable OPAC that rivals commercial products. It is possible to extend the capabilities of Scriblio with other plug-ins or additional programming. We do not yet know of a library using Scriblio as a circulation module, but it is a natural next step. Using Scriblio as an OPAC in conjunction with WordPress as your content management system allows you to keep a familiar interface so you will not have to learn different content management systems.

Institutional Repository

The need for academic libraries to have an institutional repository that houses the students' electronic theses and dissertations is becoming more prevalent. Scriblio already provides a way to store metadata about records, but it also allows you to associate an electronic file (PDF, Word document, image, video, etc.) to a record. This makes it possible to use Scriblio as a way to store information about something, but to also store the electronic version with the record.

Out of the box, Scriblio has limited use as an institutional repository, but capabilities of expansion are endless. By default, Scriblio requires that a user be logged in to add information, so user submitted files are not as easy as they are with other systems. These default settings make it so that a librarian or other administrator must input the necessary metadata. For a small institution this might work well, but this is clearly not the best solution for a large university.

The possibility of using WordPress in this fashion can spark the imagination to find other creative ways of using the system. Experiment to see what works for you, it could be that you find a solution in a way that you hadn't thought possible before.

Social Networking

BuddyPress and Mingle have been mentioned but are also worth mentioning again. They allow you to use WordPress as a social networking application in and of itself. Creating your own social network could benefit your library by connecting you with your patrons, connecting your staff, sending project information, giving assignments to student workers if you are at an academic library, sending out news items, giving tips to specific people…the list continues. Creating your own network instead of just using Facebook or MySpace is beneficial because you will have more control over the appearance of the theme (so you can keep your brand), limit the members to only include those that you add, and display only information that you approve. P2 (http://WordPress.org/extend/themes/p2) is a theme that allows you to host your own Twitter-inspired service for your users. This could be an excellent way to post staff updates and news items. If you use this theme with a Twitter plug-in, you can syndicate the feed and post at both places simultaneously. If using Facebook, Twitter, or something similar works well for your library, by all means, you should continue using it. The Social Networking capabilities of WordPress are meant to be used alongside other social platforms.

WordPress is an excellent blogging tool and content management system. Through its extensibility, it allows for customization that can satisfy many website needs. It is an excellent foundation for web applications and worth considering for its library 2.0 readiness.

For additional resources, check out the following websites:

WordPress.org
   (http://www.WordPress.org)
WordPress.tv
   (http://WordPress.tv)
WPRecipes
   (http://www.wprecipes.com/)
PerishablePress
   (http://perishablepress.com/)
Smashing Magazine
   (http://www.smashingmagazine.com/)
Nettuts+
   (http://net.tutsplus.com/)

About the Authors

Joshua Dodson is the Technical Services Technician and Web Assistant for Lincoln Memorial University in Harrogate, TN. He specializes in developing Web sites with the WordPress framework. He has developed a system for creating library subject guides through WordPress that is currently implemented at Carnegie-Vincent Library. An article on this topic has been published through the Code4Lib Journal. He has presented on topics including information literacy, open source software, Web 2.0/Library 2.0 technologies, and using WordPress for library Web sites.

Laura Slavin graduated from the University of South Florida School of Library and Information Science in 1998 with a concentration in Cataloging. Since then, she has worked at Troy University as Cataloging Librarian, and currently at Lincoln Memorial University as Technical Services Librarian. She has presented on a variety of topics including live chat reference, open source software, and enhancing library Web sites.