



◆ **Feature Article**

Web Communication Strategies in a Collaborative Environment: Lessons Learned

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A year ago we wrote an article (<http://intranet.lternet.edu/archives/documents/Newsletters/DataBits/04spring/#3fa>) about PostNuke (<http://www.postnuke.com/>), an open-source content management system (CMS), deployed locally as an experiment with community web tools. Our focus included blogs and wikis as part of a collaborative Ocean Informatics Environment (PAL LTER, CCE LTER, and others) initiated in 2004 at Scripps Institute of Oceanography. Though rich with features, we ultimately concluded that PostNuke, and other similar content management systems, are too burdensome for addressing our local and basic collaborative needs. In addition, with rapid development in this type of application arena, the administration interface for PostNuke seemed clunky, creating difficulties in maintaining something as simple as a blog.

During an initial period of CMS prototyping, we gained valuable experience with features useful to our work, including making use of the blog as a community mechanism for communication and content capture. Additionally, we created categories for organizing posts, enabled email notifications of new entries, and structured a three-tier administrator/group/public user system. Our group use of the blog is not typical; blogs traditionally are a single-user journal genre. As our PostNuke usage waned over a period of months, we shifted focus to consider some more agile alternatives. Although we investigated other open-source projects including Mambo (<http://www.mamboserver.com/>) and Xoops (<http://www.xoops.org/>), both with similar approaches to blogs, wikis and forums, we made the design choice that CMS's were not compatible with our local infrastructure development.

Though CMS's became the first in a series of experiments, our quest to find collaborative web applications continued, particularly in the blog and wiki realms. We worked with Blogger (<http://www.blogger.com/>), a free and

popular blogging service offered by Google. Blogger has some very nice features, most noticeably a stunning user interface. We set up a group blog and ported over previous entries from PostNuke. This exercise served to address migration issues, moreover, the need to capture older material archived in an abandoned application. Despite having a fresh start, Blogger quickly met the same fate as PostNuke, declining in use and, over a period of months, becoming a peripheral tool rather than a core part of our social infrastructure. Perhaps it was the fragmented nature of our project work intervals, or the lack of features that Blogger offers. One significant feature lacking in Blogger is the ability to tag or categorize individual entries, a feature we had used frequently with PostNuke. Further, although Blogger is a free service, it is not an open-source project. Posting a new blog entry requires that you login to Blogger's central server. This removes the overhead of installing and processing the blog engine on a local server, but it also removes the flexibility of extending the blog's functionality and integrating its user-base with other distributed local applications.

Another web application we experimented with was MediaWiki (<http://www.mediawiki.org>), an open-source project used by popular sites including Wikipedia (<http://wikipedia.org>). On a side note, wikis differ from blogs in that users create, edit, and link together pages in a wiki, whereas a blog maintains an archived, sequential listing of individual posts. Both tools, however, may be used for collaborative purposes. We initially found the wiki concept cumbersome, particularly the various editing conventions that provide layouts and structure for content. (These conventions are meant to simplify content generation, particularly for users unfamiliar with HTML). In addition, the wiki was generally tricky to use when porting over content and logging page changes. Because of these seemingly minor inconveniences, we were ultimately unable to incorporate it into our work practices.

Despite these shortcomings, why should the applications receive all the blame? The notion of a perfect collaborative infrastructure is more a journey than a destination. A line must be drawn at some point to distinguish an inadequate tool from an inflexible community. With thousands of open-source projects floating around cyberspace, it is difficult to settle on one without researching others. In the end, it is up to the community to let the communication flow, regardless of the media.

We recently installed a new blogging platform, the open-source project WordPress (<http://wordpress.org/>). With a simple and intuitive interface, it contains many useful features (e.g. categories), some of them critical to what we've learned to be important to local practices (e.g. email notifications), and others that are of interest for future plans (e.g. rss feeds). Could this be the perfect solution for us? Probably not, but it is fairly ideal for now, providing an outlet for experimenting with communication while communicating. Only time will tell if we will choose to sustain it. If it does fail, perhaps we will entertain the possibility that we are indeed not just a unique community, but also a finicky community incapable of engaging in the greater technological realms of communication.

The only potential obstacle for WordPress seems our willingness to embrace it as an integrating communication medium. We remain hopeful, however, that as we avoid certain tools that create a closed box of constraints detrimental to collaborative work, we will continue to nudge each other to use and develop best practices for collaborative tools like our WordPress blog. That is, of course, until we find something better!