

# Interactive Online Journaling: A Campus-wide Implementation of Blogging Software

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## ABSTRACT

In this paper, we describe the process followed for a campus-wide implementation of blogging software at the University of Maryland. On our campus there are a number of Internet-based communication tools in use including linear and threaded discussion tools, consensus-building and collaboration tools, and course management systems. Of their own accord, various faculty have begun using web logging (blog) software for their classes. Each one has his/her own instance of the blog software installed on one server or another, or hosted on another site. This makes it impractical for faculty who are less “tech saavy”. To make this technology more accessible to all faculty for their instructional needs, our Office of Information Technology has decided to test a campus-wide implementation of MoveableType 2.6. A cross-unit project team set up to explore new and existing electronic resources is spearheading this pilot. For this test and full implementation, the project team must take into account the following topics: software review and selection; policy development; user implementation, technical implementation; and, user support.

## Categories and Subject Descriptors

K.3.1 [Computing Millieux]: Computers in Education – Collaborative Learning, Computer-assisted Instruction, Computer-managed Instruction.

## General Terms

Management, Documentation, Experimentation, Human Factors.

## Keywords

Blog, web log, MoveableType, online teaching, online learning, learning journals, online journaling, Internet-based communication.

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## 1. INTRODUCTION

The quest for ways to promote better student interaction seems to be a constant among faculty. A variety of techniques for both in-class and outside-of-class communication have been utilized over the years. With the explosion of the Internet in the 1990s, this communication took the form of e-mail, listservs, bulletin boards and more. At the University of Maryland, the Office of Information Technology endeavors to continue offering viable web-based communication tools for use in instruction.

To achieve this goal, the Electronic Resources Project Team (ERPT) was established. An integral part of this group's task is to establish policies for the use of the electronic resources it supports. Based on the needs of the users and changes/advancements in technology, this group is responsible for exploring new software applications, reviewing, selecting and implementing them.

Over the past year the ERPT has been exploring new communication technologies for instructional uses to replace two applications that have been in use since around 1994. WebChat is a linear discussion tool that provides the faculty a way to focus a discussion through faculty-determined pre-set discussion topics. This tool must be planned and set up before the first use for the term. Hypernews is a threaded discussion list offering faculty the ability to create different discussion threads/topics in one forum. This tool has more flexibility but its interface can be distracting. Both of these tools meet specific pedagogical needs of our faculty but due to their complexity for set up and administration, they are no longer used heavily.

To help meet the needs for faculty to have interactive Internet-based communication for their courses coupled with a simple set up and administration interface, the ERPT has elected to implement on a pilot basis a campus-wide instance of a web log or blog. A blog is designed primarily for online journaling; however, a number of our faculty have begun using free blog resources to support their classes. Through the use of various templates, faculty have used blogs to post class announcements, syllabi, assignments, and more in addition to offering students a forum for discussing class topics.

At the University of Maryland, the process for implementing a campus-wide blog includes an application review process, policy development, a user implementation plan, a technical

implementation plan, and a support plan. The user and technical implementation plans are very much interlinked.

## 2. SOFTWARE REVIEW PROCESS

A standard review process includes meeting with faculty to create a list of desired functionalities. It is then put into a table to review the importance to the faculty of each function. A technical specification matrix is added to the functionality matrix. The technical specification matrix focuses on the technical requirements to determine supportability of the tools being researched. Once these two are meshed, the ERPT begins a survey of available applications that meet these requirements. The applications that best fit the functional and technical requirements are then presented to an advisory committee for comment. The ERPT will, then, select one or two of the tools to pilot on campus. After the pilot, the ERPT will make one of three recommendations: 1) Full implementation; 2) Continue researching tools for a better option; 3) Do not implement.

With one blogging tool being predominant in its use by faculty on campus, the review process was streamlined. MoveableType had a number of individual instances already installed on campus. However, the committee did review a number of other tools to determine if MoveableType was the appropriate tool for our faculty's instructional needs. With faculty use a clear indication of the usability of the product, the team agreed to pilot the implementation of MoveableType.

## 3. POLICY DEVELOPMENT

When a new tool is selected a number of concerns arise regarding policy who can use the tool, what can be done with the tool, how long can files or information remain in the tool, etc. The ERPT worked with our NEThics office to help develop a standard set of policies that would guide the development of the tool-specific policies. The basic form of these policies is:

1. **Acceptable Use:** The "Guidelines for the Acceptable Use of Computing Resources" ([www.umd.edu/aug](http://www.umd.edu/aug)) is the primary policy guiding users' conduct on all university computing resources, including those supported by the Electronic Resources group.
2. **Privacy:** Users' personal and confidential information will be protected from unauthorized access or disclosure through security measures that protect the loss, misuse and alteration of information. The university policy on the *Security of Administrative Data* is available at <http://www.umd.edu/PRES/policies/x600a.html>.
3. **Users:** In accordance with the team mission, the faculty user group, and the academic environment are the primary areas of focus driving resource selection and development. This does not preclude the use of the electronic tools by other campus constituencies, nor for other purposes.
4. **Terms of Use:** Terms of Use of Electronic Resources Project Team tools may vary. Product site licenses and software agreements will be the primary sources of terms of use. Limitations on session length and/or disk space quota will be determined on a case-by-case basis to maximize enterprise-wide use of team-sponsored resources.

5. **Evaluation:** Evaluation of tools will occur on a semester or annual basis, based on the level of usage. Measures on which evaluation will be based will be identified as part of the roll-out process of newly-introduced resources.
6. **Training and User Support:** Training and User Support will be provided by units of the Academic and User Support group of OIT.

These policies form the framework in which tool-specific policies are created. For example, the implementation of blogging software like MoveableType required more specific policies to be developed.

**Length of Use:** Blogs set up for instructional purposes will be archived at the end of each semester and removed from the server unless otherwise requested by the faculty member.

**Evaluation:** At the end of each term, faculty will be asked to complete a survey regarding their use of the blog. This will focus on both technical and pedagogical experiences during the semester. The pedagogical information may be added to a list of best practices for the tool.

## 4. USER IMPLEMENTATION PLAN

The team has adopted a staged approach to user implementation of UMCP blogging services. In order to provide a platform for testing, feedback and user acceptance, a small group of faculty will be recruited for a pilot run of blogging services in fall 2004 prior to the execution of an anticipated campus-wide rollout in spring 2005. This group of faculty has been termed "pilot partners" and has agreed to use a blog pedagogically in one of their fall 2004 semester courses and provide feedback to the OIT implementation team.

### 4.1 Pilot Project

The pilot project is designed to give the team a good understanding of the desire and need for blogging on campus. During the pilot, the team will be collecting information on the use of the individual blog spaces. This includes pedagogical uses, such as class announcements, assignment distribution, interactive discussions, guided topic reflections, student learning journals, etc. The team will also take into account the use of disk space for each blog, as well as the general activity on the blog. Faculty and student surveys will provide feedback and qualitative data to assist in the full roll out of the blog, in addition to developing a list of best practices for using a blog for teaching and learning.

### 4.2 Pilot Partners

Pilot partner faculty will participate in a one-day blog training workshop created by the committee at the end of the summer (before the fall semester begins). In addition to this short course, technical support will be provided to pilot partners throughout the fall semester. As part of the pilot project, pilot partners will be asked to fill out an evaluation at the beginning and end of the fall semester. This survey will allow the committee to obtain valuable feedback on the ease of use of the blog and pedagogical issues that can be addressed through use of the blog. In addition, students enrolled in pilot partner courses will be asked to fill out an evaluation at the beginning and end of the course in order to gauge the impact of blog use on the learning process.

**Table 1. This is the planned timeline for the pilot implementation**

| Tentative Implementation Timeline |  |
|-----------------------------------|--|
| Summer 2004                       | <ul style="list-style-type: none"> <li>▪ Train Pilot Partner Faculty</li> </ul>  |
| Fall 2004                         | <ul style="list-style-type: none"> <li>▪ Launch pilot sites</li> <li>▪ Conduct evaluation of blog use</li> <li>▪ Correct any system errors found</li> <li>▪ Finalize Admin procedures</li> </ul> |
| Spring 2004                       | <ul style="list-style-type: none"> <li>▪ Use Pilot Partner Feedback to Market roll-out to campus</li> </ul>  |

### 4.3 Full Roll Out

Full roll out of the blog to campus will be determined by the information gathered during the pilot project. To make a seamless transition from the pilot to the full roll out, plans are started during the pilot. Plans for the full roll out include marketing the software to faculty, training plans, support plans, and technical needs.

#### 4.3.1 Marketing

The traditional way to reach faculty about new tools has been through publicized training and word of mouth. With the help of a faculty advisory committee for Academic and User Support, we are exploring other avenues to involve more faculty in the selection of new tools, as well as to keep them abreast of tools when they are being implemented.

#### 4.3.2 Training Plans

Faculty training for the new tools is usually offered through our Institute for Instructional Technology, a series of free workshops for faculty on many of the tools offered through OIT. These workshops are generally offered during the summer and winter sessions. We also do one-on-one training for faculty through out the year

#### 4.3.3 Support Plans

Support for new tools is conducted primarily through our Help Desk. General questions regarding authentication and access for both faculty and students are answered there. If there is an issue that needs a more technical or pedagogical response, it is referred to the appropriate person on the team.

#### 4.3.4 Technical Needs

The technical aspects of the implementation depend on the needs of the faculty. Issues of course integration, authentication, and ease of use are all part of planning for the full implementation. Other aspects that are also considered in this area are storage and back up policies, monitoring usage, and archiving past course blogs.

## 5. TECHNICAL IMPLEMENTATION

For the pilot implementation of MoveableType, the actual technical implementation has been minimal. It is an individual installation of the software with minor adjustments for administration purposes. While this seems appropriate for the pilot, to meet faculty needs for the full implementation the team

has begun considering different options regarding authentication, course integration, and ease of use. To make these possible there will need to be a great deal of programming and tweaking of the MoveableType software.

### 5.1 Authentication

There are two levels of users for MoveableType: author and commenter. The software has an internal method for authentication that allows authors to log in to submit postings. As a normal part of the program, commenters do not need to log in. They only need to provide some information when making a comment. At the University of Maryland, we are working toward a single form of authentication for all supported tools. We use Directory or LDAP authentication for most enterprise systems on campus. For the full implementation of the blog, Directory authentication is desirable.

The issue, when planning for Directory authentication, is the level to which faculty need or want students to authenticate. The most basic level provided by authentication would be site access. No other information would be used. Students would be able to comment on any of their faculty or classmate blogs in the same manner as with an open MoveableType installation. This would allow for anonymous comments. The next level would tap the Directory information to input the student name and e-mail address in the appropriate fields when commenting. This would then eliminate the possibility of anonymous comments. At the upper end, a high-level authentication method would track individual activity on the blog. This would permit faculty to observe an individual's activity on the blog without needing to access each blog or posting.

The question of authentication also encompasses the idea of access to various blogs. An open system would allow anyone to access all blogs. While some faculty appreciate an open system and encourage students to read and comment on others' blogs, there are many that would prefer that access to their class blogs be given to registered students and invited guests only.

### 5.2 Course Integration

To limit access to blogs to registered students, the class list would need to be entered into the application and specified as to which blogs they have access. For small classes this can easily be done by hand, however, for large classes this would be a cumbersome task that would be difficult to keep up with. As with our course management system, we anticipate that faculty will be able to connect to our student information system (SIS) to upload class rosters. This would eliminate the tedium of typing in numerous student names and Directory ids.

The question of guest accounts for a blog is also an issue we need to consider. There are times when a faculty member will ask a content expert to join in a conversation or communicate with students after a guest lecture. If Directory authentication is used, a method similar to that used for our CMS to create guest accounts needs to be considered. It is vastly important that all of these systems be easy for the faculty to use.

### 5.3 Ease of Use

For most faculty to want to integrate a tool into their classes, it must be relatively simple to use while also providing flexibility. The pilot of the blog implementation is very simple since there are

no choices. Using the model of our CMS (<http://www.courses.umd.edu>), we will need to create a series of web pages that are clear and meet the needs of the faculty. The pages would include a blog request form, a class roster upload request form, and a method to create guest accounts. An easy way for faculty to view their allowed user list is not built into MoveableType. This would need to be developed. Along with the development of these request forms, a series of pages on the use of the blog would contribute to the ease of use of the system.

## **6. USER SUPPORT**

Support for any instructional tool is vital to its ongoing use among faculty. For a campus-wide implementation of a blog, we will provide different types of support. Support during the pilot will vary greatly from the full implementation in that it is during this phase that the team will gather the necessary information to provide the best support later. The support for the full implementation includes, frontline support, technical support, and pedagogical support.

### **6.1 Pilot Support**

During the pilot, the team members will handle all user support issues. A single point of contact such as the committee is needed for the pilot so all feedback can be analyzed easier. Support areas include authentication, software compatibility, content publishing, template usage, and roster creation. Several more areas of support may arise during the pilot. It is during the pilot that areas of support can be developed and refined and limitations on what will be possible established. Furthermore, what support roles the Help Desk and administrators will have when roll-out occurs will become clear.

### **6.2 Frontline Support**

For the full roll out of the blog, the Help Desk will most likely handle authentication and software compatibility issues. Since authentication will be done through the Directory much like other systems within the university, troubleshooting should be routine. Web browser versions and configurations will comprise most of the software compatibility issues. Depending on how much access is given to the Help Desk, the other areas of support will be handled by the administrators. Should the Help Desk be given “dummy” accounts, they would be able to assist users in content publishing and template usage. If not, then the procedure would be for the Help Desk to obtain as much information about the problem and relay it to the appropriate administrator. As for instructional support, besides the training sessions, web pages will be created with information on how best to utilize the weblog.

### **6.3 Technical Support**

For issues that cannot be resolved by the Help Desk, issue will be referred to the next level of support. There are two aspect of

technical support. First is the general administration and use of the blog. This area supports many of the calls that deal with limiting access to a blog, creating guest accounts, selecting a template, etc. While much of this will also be available on the web site, frequently phone calls and e-mail are the mode of support. The second focuses more on the backend technical support such as server problems, recovering an archived blog from a previous semester, etc.

### **6.4 Pedagogical Support**

When a new tool is introduced, faculty can be a little reluctant to use it unless they have an understanding of what it can add to their instruction. Support in this area centers around what faculty want to accomplish with their students. Whether it be discussion, class announcements, assignments, or learning journals, we will talk with faculty in training sessions or one-on-one about the possibilities of a tool. As faculty get used to the tool, they will become more innovative and begin to use it in more ways than expected. These will be captured in to a list of best practices that can be shared with other faculty when they are looking into uses of the tool.

To aid faculty in using a tool like this, a number of templates will be selected and made available. These templates can range from primarily a linear discussion template, to a template that allows for the presentation of course materials. The templates will be selected when they are requesting their blog.

## **7. THE ROAD TO IMPLEMENTATION**

As we try to meet the needs of faculty while keeping up with rapidly changing technology, many issues arise and must be dealt with. In considering a campus-wide implementation of blogging software, we need to consider issues of policy, marketing, training, technical and pedagogical needs. Questions of authentication and SIS integration loom on the horizon. Thoughts of support for technical needs, and pedagogical questions are a constant part of the landscape. This will be a journey fraught with obstacles, options, and learning. The pilot is our first step on the road to implementation.

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