



University of Massachusetts Boston

February 1, 2008

Information Technology Council
Subcommittee on Academic Technology
University of Massachusetts

Dear committee members:

Please accept the attached proposal (Learning can be del.icio.us) for consideration as a Personal Teaching Improvement grant. This letter will also serve as my letter of intent to complete the proposed work in the time allotted should an award be provided.

The goal of the project is to leverage emerging web 2.0 technology to facilitate student engagement in collaborative research projects. By using social tagging across two sections of the core undergraduate management course (Managing Organizations - MGT 303) at the College of Management, I will demonstrate how new (and widely available) web 2.0 technology can be used to improve student engagement and collaboration.

While I have submitted this proposal as a Personal Teaching Improvement grant, I intend to collect qualitative and quantitative data about the impact of the project that will be used for scholarly presentations and publications. I have a long history of commitment to combining high quality teaching practice and scholarship as demonstrated by my Donald J. White Teaching Fellowship at Boston College and my current paper under revision at the Journal of Management Education (see attached CV for details).

By working with an outside consultant to help us collect and analyze student's web usage patterns, we can make significant contributions to both the theory and practice of teaching with technology.

Thank you for your consideration of this proposal.

Sincerely,

Pacey Foster
Assistant Professor of Management
College of Management
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**Learning can be del.icio.us:
Using social tagging to facilitate asynchronous research collaboration in undergraduate
management courses**

A proposal for personal teaching improvement

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Funds Requested: \$8,000

Abstract:

Engaging students in collaborative research projects is a challenge faced by many college professors. Emerging web 2.0 technology can be used to overcome these challenges by facilitating student engagement in asynchronous research collaborations. By using social tagging (an emerging web 2.0 technology) across multiple sections of a core undergraduate course at the College of Management, we will demonstrate the value of social tagging for facilitating asynchronous student research collaboration.

_____ Department Chair, Management and Marketing

_____ Dean, College of Management

_____ Provost

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Project Narrative

Collaborative student research projects are a common component of many college courses. In these projects, student teams are assembled and asked to work collaboratively on some topic of mutual interest resulting in a final paper or other deliverable. The challenges of managing these projects are familiar to anyone who has implemented them. Students often find it hard to collaborate effectively and sometimes require assistance in coordinating their efforts. These challenges are significant even at residential campuses where students can meet between classes relatively easily. At commuter campuses like UMASS Boston, these coordination challenges are compounded by the fact that students do not live on campus and must rely more heavily on groupware technology like Web CT and Quickr.

Although groupware technologies do help students coordinate their efforts by allowing them to meet virtually, they also contain significant limitations. The most important limitation is that they do not facilitate playful use of the internet as a collaborative research tool. Moreover, because these sites are rebuilt each semester, they do not accumulate the significant efforts that student research teams put into assembling information sources for their projects. By supplementing these groupware systems with emerging web 2.0 technology we can increase the value and impact of student research collaborations across multiple sections of a course over time.

Web 2.0 is a term that describes a range of emerging technology that makes the internet interactive and social. These technologies are widely used by students in their social lives, but rarely in their classes. Examples include social networking sites like Facebook and MySpace, collaboratively edited sites like Wikipedia, blogs and social tagging sites like del.icio.us (www.del.icio.us). Social tagging operates much like bookmarking does in a traditional web browser. When you visit a web site that you want to remember using a traditional browser, you simply add that site to your bookmarks for

future retrieval. Social tagging operates similarly, but with two important modifications: Your bookmarks are stored on a public page within the del.icio.us site and contain user generated tags (aka keywords) to help organize them.

Among social bookmarking sites, www.del.icio.us is one of the most popular and user friendly. After creating an account, a user can easily post links to her del.icio.us page simply by clicking a browser button. Each time a link is saved to the user's del.icio.us page, the system prompts the user to provide some descriptive tags for the link. By combining social tagging with student projects, we can transform student web browsing into a collaborative effort that can facilitate asynchronous research projects.

The proposed effort will evaluate the use of social tagging in two sections of the core undergraduate management course (Management 303 – Managing Organizations) in the College of Management at UMASS Boston. During the spring semester of the 2008-2009 school year, students in two sections of MGT303 will be required to create their own del.icio.us accounts and begin tagging web content with the “MGT303”. Students will also be encouraged to include any other tags they find useful for their group projects -- like team names and topical keywords. As students tag an increasing number of websites, it will build a collective repository of web resources related to the course content which will be available to other members of their teams and the class more broadly. Most importantly, these links will survive beyond each semester and can serve as a resource for future sections of the same course. As the number of student generated tags grows over time, researchers will also be able to track the emergent categories and processes that they use to organize the course material.

In the fall of 2008, the deli.cio.us tagging assignment will be created and built into the spring syllabus for MGT 303. The principal investigator will also meet with a consultant from IBM's Collaborative User Experience (CUE)¹ group in Cambridge, MA to plan the data collection process. During this time, we will identify an undergraduate research assistant with relevant computer

¹ The principal investigator has been in contact with a member of this group who expects that he will be able to consult with us either individually or as a representative of IBM. However, IBM's CUE group has not yet formally agreed collaborate on this project as of this time.

experience to help administer the project starting January 15, 2009. By the end of the winter break, we will have planned the spring implementation and designed the student evaluation instrument. At the start of the spring semester in 2009, students in two sections of MGT 303 will be introduced to the project and asked to create their own del.icio.us accounts. As students progress through the semester, they will be encouraged to use the del.icio.us tagging for their group projects and social tagging will count toward their participation grade in the class.

At the end of the spring semester, we will administer a paper survey that will ask students to assess the value of social tagging and explain whether and how it was used in their group projects. Unfortunately, the links posted to del.icio.us will not automatically generate a database that we can use for subsequent analysis. Therefore, with the help of the consultant, we will collect data on student use of the site by downloading it at various points in time throughout the semester. This will give us objective measures of student utilization over time. This data will allow for subsequent analysis using social network and other visualization methods to identify the social and informational structures associated with students' use of the site.

Project deliverables

The primary deliverable of the project will be a permanent and growing collection of web links, organized by students themselves via social tags. If students find this valuable, it will be relatively easy to continue the effort in future sections of the course. In addition to the inherent value the project can provide to students, it also represents an opportunity to study the impact of web 2.0 technology in facilitating student research collaboration. Working with a consultant to help us download the site at several points during the semester, we will assemble a rich data set on student usage. In addition to providing objective measures of student utilization rates, it will show how the site evolves, thereby documenting the emergence of a virtual student research community. The principal investigator will analyze these data and submit the results to appropriate academic conferences and journals such as the Academy of Management Learning and Education, Journal of Management Education and the Organization Behavior Teaching Conference.

Budget

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| Qty | Description | Unit price | Item subtotal |
|-----|---|------------|-------------------|
| 1 | Undergraduate research assistant from January 15 - May, 2009 (10 hrs/week for 4.5 months = 180 hrs) | \$13.00 | \$2,340.00 |
| 4 | Days of consulting services from a member of IBM's Collaborative User Experience (CUE) research group to assist in evaluation of the project outcomes | \$1,000.00 | \$4,000.00 |
| | Summer salary for the principal investigator to analyze the data and write up the results for publication in 2009-2010 | | \$1,660.00 |
| | Total | | \$8,000.00 |

Project timetable

| Project Activity | Timeframe |
|--|--------------------|
| Small pilot study in one section of MGT303 to demonstrate feasibility | Spring 2008 |
| Scoping the evaluation effort with consultants, designing the project and integrating the assignment into the spring syllabi | Fall 2008 |
| Implementation in 2 sections of MGT 303 | Spring 2009 |
| Periodic collection of the del.icio.us site during the semester | Spring 2009 |
| Survey implementation in 2 sections of MGT 303 | April 2009 |
| Data analysis and final presentation of results | May 2009-June 2009 |