



Hot Teams

## 7 Things You Need to Know about Facebook Applications

A white paper from Teaching and Learning with Technology and the University Libraries at Penn State

### Case Studies For Future Development

#### iStudy modules

From Web site and ANGEL statistics, we know that students are no longer receiving the information we are sending out through e-mail about the iStudy for Success! modules. Anecdotal information indicates that students no longer stay connected through e-mail, but rather through private IM networks and phone text messages, even to the point of avoiding e-mail because of the large quantities of spam and phishing scams. As a result, we need to find new ways to let students know about iStudy as well as the many other valuable resources available to them at Penn State. Because so many Penn State students use Facebook, it looks like a good place to try to connect. An application where students could search for study skills information, leave comments and tips for other community members, recommend modules to other community members, and, possibly, have a way to talk directly with a tutor about a study skills question, might give us a new venue for interacting with students and providing information they need in order to have a successful academic experience.

#### University Libraries

An initial Penn State Libraries Facebook application would have basic features like the ability to search the Libraries' catalog, ProQuest (a third-party database that provides full-text articles from a broad range of publications), and information about the Libraries' Ask! service (chat, e-mail, phone, and in-person reference service). Because the social component of Facebook is its strength, new ways of adding social components related to library activities would be beneficial. The following examples are ways in which the social aspect of Facebook could be used in a library application:

- A type of "Marauder's map" allowing students to place their location on a floor map to indicate to their friends where they are studying in the library. Taking this a step further, there could be the option to set a

### 1. What Is It?

In May 2007, Facebook launched the Facebook platform. The Facebook platform allows developers to create Web applications that integrate with Facebook's social network and are delivered via the Facebook Web site. Applications run on the developer's server, and any data unique to the application is stored on the developer's database. Although running on an independent server, Facebook applications can query Facebook data in order to take advantage of Facebook's existing social network. Facebook users can browse available applications and enable the ones they wish to use, granting them permission to access a subset of their account data.

### 2. Who's Doing It?

A handful of academic libraries have started developing applications for Facebook that serve as entry points to library resources and services. Most of these applications to date are very basic, although some have additional features which make them stand out. A few of note for these special features are: "Swem Tools" (College of William & Mary), Ryerson University Library (Canada), and "UM Library Search" (University of Michigan). Others include the University of Illinois at Urbana-Champaign, University of Alberta, University of Alabama in Huntsville, and University of Notre Dame.

### 3. How Does It Work?

Facebook applications work by running code on your servers, and feeding it through Facebook to the end user. Under normal circumstances, Facebook will then phase out extraneous HTML, and render the page with its own Facebook style, to help all Facebook applications blend well with Facebook at large. These styles can be overwritten, if desired. Facebook applications are built using a modified HTML tag set known as FBML. These tags provide simple formatting as well as access to pre-built Facebook functions. When building your own application pages, you can use a wide array of languages supported by the Facebook platform, though PHP tends to be the default standard for most developers.

One of the biggest draws to developing for Facebook, however, is the ability to access Facebook data on a larger scale than small FBML calls. As such, Facebook provides all application developers with access to a large array of Facebook API calls that allow your application to pull or use almost any information a user has submitted to Facebook. If the pre-built functions do not offer your desired functionality, Facebook also supports direct queries via an SQL-like language which they call FQL. FQL does offer developers the increased flexibility to pull Facebook information as they need it.

For more information on the Facebook development platform, check out the Developers Wiki at <http://wiki.developers.facebook.com/>.

### 4. Why Is It Significant?

The development of customized tools within Facebook increases the usability of Facebook, expanding the capabilities beyond just a social networking tool, and making it a more versatile tool for working with students. By developing tools within Facebook, you are building on the existing social networks, enabling groups to form around not only interests, but also needs and activities. This could in turn

status at the same time so that friends know you are “ready for a study break” or “in the studying vortex.”

- Ability to share a library record with your friends, whether for leisure reading or something to help complete an assignment.
- A link within the listing for each book to a map showing its location in the library.
- Reminders about holds and overdue materials via the Facebook interface.

## On the Web

Facebook’s developers site  
<http://platform.facebook.com/>

Penn State University Libraries Facebook Application  
<http://apps.facebook.com/psulibrary/>

## Who to Contact

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lead to more interaction among the participants, enriching the learning experience, increasing retention of the subject matter, and increasing academic satisfaction.

A tenet of librarianship is to be where the users are. With 93% of Penn State students being Facebook account holders, it makes sense for the University Libraries to have a presence here. Because this is an environment where students are very comfortable, they may feel less intimidated to begin their research using library tools offered in Facebook. The social component that is the strength behind Facebook can be leveraged to increase the “fun factor” and lessen the library anxiety factor. An added benefit is that it can serve as an outreach and marketing tool to students about new services.

## 5. What Are the Downsides?

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There are several challenges surrounding the use of a Facebook application in a university setting. First, there is the issue of associating a Facebook user with his or her university account. Data being delivered to the user via a Facebook application is passing through the Facebook service, so steps must be taken to ensure sensitive data is not shared. In addition to these security concerns, there is also the question as to how receptive students would be to academic content in Facebook. Also unknown is whether Facebook will continue to be popular with the student body. Taking advantage of Facebook’s social networking features makes sense, but only so much as students are actively using the service. It remains to be seen whether Facebook applications will be adopted long-term. There are currently over 3,800 Facebook applications available. It is possible that the flood of applications are ruining the appeal of Facebook for many users.

## 6. Where Is It Going?

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According to the PULSE survey on Net behaviors from November 2006 (<http://www.sa.psu.edu/sara/pulse/145-NetBehaviors.pdf>), 70% of students at Penn State’s University Park campus log on to Facebook at least once a day, with 93% of students having a Facebook account. The Facebook platform provides an opportunity for institutions of higher education to leverage the environment that students are already using to communicate and collaborate. In July, Facebook discontinued their own “courses” application that let students collaborate around course sections with the hopes third-party developers would create more robust solutions.

## 7. What Are the Implications for Teaching and Learning?

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By building tools into the Facebook social structure, you will encourage more interaction among participants. Kinds of interactions and the implications of those interactions will depend on the topic of the group and the goals of the tool. With the library tool, for example, a student who might be having trouble searching the electronic library catalog or figuring out how to use the Penn State library system might be more inclined to ask a “friend” in the group for help or use the “Ask a Librarian” button instead of getting frustrated and giving up. Librarians can use a library Facebook application as a way to establish a personal connection with students, who we often only teach in “one-shot” library sessions. The Facebook application already developed by the Libraries can and already does provide another avenue for submitting reference questions; however, adding features may help to increase these types of services. Overall, this type of platform can help to make the Libraries’ environment more open and accessible, thereby inviting more interaction and teaching opportunities.

If we transfer the library scenario across to the iStudy for Success! learning skills modules developed at Penn State, the group members might start sharing study tips as they discover which of the modules are most useful. They might recommend modules to each other based on needs expressed during their social interactions. All of these activities would help students improve their study skills, which will in turn enrich their academic experience and satisfaction at Penn State.

An additional benefit of using Facebook to build these topic-specific tools is that students will not lose access to them when they leave the Penn State system. Because these tools are built in an open venue, students will not necessarily have to be a current member of the Penn State community to benefit from them. As social computing applications are being used more in instructional situations, faculty are finding that students do not stop participating in discussions just because they have finished the course. This continued interaction with the instructor, each other, and new students is a benefit to everyone involved and another indication of the cultural change to lifelong learning.

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