

Discussion Forums in Curriculum Review

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Background

Queen's medical school celebrates its sesquicentennial anniversary this year, and this has stimulated a review of the undergraduate medical curriculum. In order to create an online archive of curriculum opinions and suggestions, and to stimulate broad participation in the process of curriculum renewal, we are experimenting with discussion forums and share here our preliminary experiences after the first ten weeks.

Methods

There are literally hundreds of forum software packages available to use for a multitude of programming languages and budgets. An increasingly common programming language of choice for developers is PHP, a recursive acronym for "PHP: Hypertext Preprocessor". PHP has a number of benefits, such as being open source and easily embedded into XHTML.

The forum software chosen for use in this project is called Invision Board, which is developed by Invision Power Services. This software was chosen for a number of reasons, including the fact that there is a freeware version that can be downloaded and used at no cost. It is also a very mature product and has been around for many years, so the number of bugs or problems with the program is minimal. Other examples of forum software can be found in the "More Information" section of this poster.

Requirements to install Invision Board are minimal (PHP 4.1.2+, MySQL 3.22+) and the installation process takes all but a few minutes for an experienced developer.

The Curriculum Review Discussion Forum was launched in mid-February 2004, along with a curriculum review website. All students and faculty in the medical school were pre-registered into the forum and were notified by e-mail, and a custom script embedded individualized usernames and passwords into the e-mails.

The first posting included minutes from a recent town hall meeting that inaugurated the curriculum review process, and an invitation to use the forum. The number and names of forums were predetermined and fixed (e.g. curriculum content, curriculum delivery, evaluations, clinical skills, problem-based learning, clerkship, faculty development, and miscellaneous) in order to provide some structure to the postings, however new topics and replies may be posted within any forum. It is impossible to post anonymously. The co-moderators for each forum were the responsible faculty member for that part of the curriculum (e.g. Evaluations Coordinator) and the Assistant Dean.

Beginning April 8th (week #10), automatic e-mail notifications were sent by default to all students and faculty whenever a new posting occurred, in an effort to increase awareness and use of the discussion board.

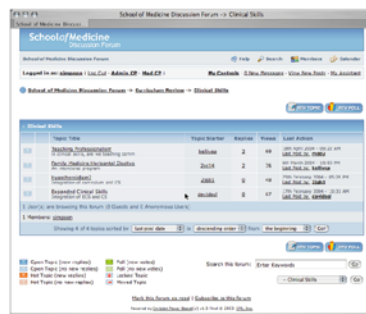
Forum Software Screenshots

The following screenshots demonstrate the layout of the forum software and the process of going through, reading and responding to a post.



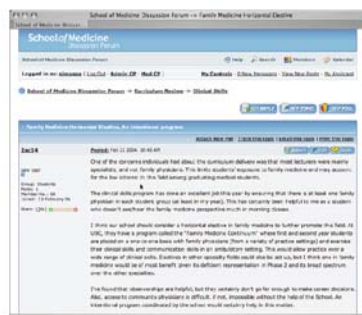
Screen Shot 1 - The List of Forums:

This screen shot shows the default listing of forums. It also shows the number of topics and replies that were made in each forum, as well as details on the last post within.



Screen Shot 2 - Sample List of Topics Inside a Forum:

This screen shot shows the topics within a forum. This list is constantly updated with every new post and posting reply. The user also has multiple options on this page, including posting a new topic, a new poll, searching the forum, and sorting the topics based on certain criteria.



Screen Shot 3 - A Sample Posting:

This screen shows what an actual topic looks like when someone posts one. If another user were to reply to this topic, it would show up directly underneath the primary thread starter.

Results So Far

There was good activity on the discussion board in the first four weeks, but activity then ceased for five weeks. Implementation of an automated e-mail notification system then triggered a fresh wave of new topics and topic replies, and the volume of activity on the forum is now higher than ever.

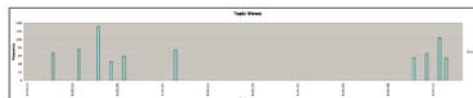
There have been 34 postings on 13 topics, and 59% of the postings occurred after the automated e-mail notifications began in week #10. These various postings have been viewed 731 times, and 38% of these viewings occurred after the notification intervention.

Few users requested technical assistance in order to log in successfully, and only a few users (<1%) objected to the automated e-mail notifications.

The general quality of postings is high, and no inappropriate language or other netiquette issues have arisen so far.

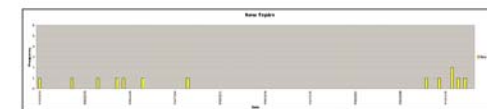
Simple Usage Graphs

The following three graphs show the initial usage statistics for our on-line discussion forum. Details about each graph are below the corresponding graph:



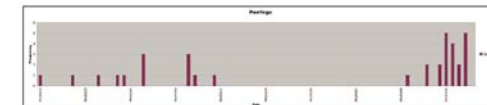
Graph 1 - Topic Views:

This graph shows the number of times that registered users viewed any topic. Note that when the forum first opened, there was a higher number of topic views, followed by a period of inactivity until automatic e-mail notifications were implemented.



Graph 2 - New Topics:

This graph shows the number of new posts that were made per week.



Graph 3 - Postings:

This graph shows the total number of postings that were made on the forum. Postings include new topics being posted as well as replies made to topics. Again, automatic e-mail notifications appeared to prompt individuals to actively participate in the current discussions.

Preliminary Conclusions

- ▶ The initial volume of postings was predictably low, as people cautiously explored what for many was a new method of communicating. It also takes time for users to gain confidence that their public musings will be well received, but the lack of anonymity might also explain the high quality of postings.
- ▶ Automated e-mail notifications seem effective in promoting greater participation in the discussion forums. It is still premature to say if this intervention will have a lasting effect.
- ▶ Active users who post regularly might be better discussion forum moderators than curriculum directors.
- ▶ Integration between this discussion board and an online evaluation system would be desirable.
- ▶ Ultimately, the success of a discussion board also depends on the perception by students and faculty that they were part of a transparent process of curriculum review and that their opinions had influence on curriculum planners.

More Information

Although the School of Medicine has decided on using Invision Power Board to power the discussion forum, we highly recommend that anyone interested in a similar project take a look at many of the other forum software packages available.

Forum Software Links:

- ▶ Invision Power Board (Freeware)
<http://www.invisionboard.com>
- ▶ vBulletin (Commercial)
<http://www.vbulletin.com>
- ▶ phpBB (Open Source)
<http://www.phpbb.com>
- ▶ Phorum (Open Source)
<http://www.phorum.org>

