Redesigning Instructor Evaluation at Illinois Institute of Technology

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Introduction

Instructor evaluation is a significant issue for university administrators, students, and instructors alike. Administrators need data to make decisions regarding personnel (such as granting tenure) and academic programs (such as continuing to offer a certain class). The current instructor evaluation system at Illinois Institute of Technology was designed to meet these administrative needs. The system consists of two closed-ended questions that allow students to evaluate the instructor and course on a five-point Likert scale, as well two comment boxes, one for the instructor and one for the course. The administration only maintains records of the statistics from the Likert scales and eventually deletes the comments. In an attempt to prevent retaliatory feedback from students receiving poor grades, students have only the last three weeks of the semester to complete the evaluation. Once the evaluation system closes and final grades for the semester are submitted, instructors can access descriptive statistics of the student responses to the Likert scales and view student comments. Any student from IIT can view the statistical average of the total responses to the two close-ended questions, but cannot view the comments.

While this system may provide the basic data that administrators need, it neglects the needs of students and instructors for useful instructor and course evaluation. Students want to hold instructors responsible for the quality of education they offer, but are hindered by the limited design of the evaluation form and short time window for completing evaluations. Students are also interested in seeing previous students' reviews of a course to help them decide whether or not to take it, but the current system only displays the Likert averages without the context of comments. This prevents students from truly tapping into the information held by the "many minds" of their fellow students, or leads them to use third-party sites, such as [Rate My Professors](), which have no university moderation.

For instructors, the current system is even more unsatisfactory. Instructors may desire feedback on their course scope, readings, assignments, exams, grading, teaching method, and more, but they have no way in the current system of asking about any of these things directly. Many instructors also desire feedback throughout the semester, while there is still time to make adjustments to the course, but the system does not support this. Some instructors may be concerned that although the system forces students to give feedback before receiving their final grades, students who anticipate poor grades may provide embellished or simply untrue comments out of frustration. Finally, many instructors have had the experience of students telling them after graduation how valuable a particular course has been in their careers but this information is left uncaptured by official university evaluation methods.

These student and instructor issues should be a concern to the administration. IIT's strategic plan includes a goal to "promote innovation and excellence throughout the university." The current instructor evaluation system cannot be considered excellent and does not provide students with an outlet for meaningful feedback on courses and instructors; likewise, the current system does not provide sufficient functionality for instructors to query students and utilize student evaluations to make improvements to future courses. Accordingly, we have created a prototype evaluation system that addresses the concerns above.

Functionality and Interface Design

Our prototype is built on the free and open source forum software phpBB. phpBB has many features that can be used to create a more flexible and useful instructor evaluation system, such as forums, polls, and private messaging.

Instructor and Course Evaluation Forums

A message forum for each course will allow instructors to solicit feedback from students in a way that is adaptable to the instructor's needs, allowing anonymous but accountable feedback over a more meaningful time window. The instructors will post open-ended questions, and students will respond using anonymous log-ins provided at the beginning of the semester. Although responses are anonymous, other students will see them and be able to elaborate on or challenge others' ideas, which gives the instructor and administration a more well-rounded perspective on the comments. Additionally, it is easy for instructors to see all of the posts made by a particular student. The instructor (and, optionally, administrators or other members of the academic department) could moderate the forum, although self-moderating systems (e.g. social voting to hide unhelpful comments) could be implemented in the future.

In addition to a forum for each time the course is offered (e.g. Fall 2009, Spring 2011), an alumni forum will indefinitely be accessible to students so that they can submit additional feedback at any time — even months after they completed the class — if future events have changed their perspective.

We have also provided a closed forum for instructors, TAs, and administrators with tips on using the phpBB system and a list of suggested questions. While the system is designed to provide instructors maximum flexibility in the questions they choose to ask, we also understand that a blank page can be a bit intimidating, so some instructors may find starter questions helpful. This also provides an opportunity for the department or university to suggest certain questions they would like each instructor to ask, so that they can compare responses across courses.

Customizable Close-Ended Questions (Polls)

While the Likert scale questions in the current IIT evaluation system are inadequate, close-ended questions do serve a useful purpose of easily aggregating opinions from numerous individuals. The polling feature of phpBB can be used by instructors to ask as many close-ended questions as they choose — writing their own or choosing from suggested questions provided in the instructor forum. Instructors can also choose not to use the Likert scale and

create a different type of close-ended question. This feature allows instructors to get quick feedback on topics they are curious about, and since the system is available throughout the semester, they can use the data they gather to make adjustments before the course is over.

The poll feature currently on our site demonstrates the basic functionality of this feature. In the future, it would be advisable to customize this feature to hide results until all students have had an opportunity to respond so as to avoid an information cascade.

Private Messaging
While the ability for students to see and comment on each other's feedback is valuable, there may be occasions in which a student may want to offer anonymous feedback directly to the instructor. For example, they may wish to comment about a group project and fear the other members of the group would be able to identify them by their comments on the forum. The private messaging system of phpBB would allow the student's comment to go only to the instructor, and since the student's log-ins are anonymous, the instructor would be able to read the message and reply (if necessary), all without knowing the student's identity.

Future Work

This system prototype was designed as a pilot for one professor teaching one course. Our focus has been on successful installation and implementation of the system on a live server and enabling the necessary functionality, while the appearance of the interface has been secondary in importance. Moving forward, the appearance of the system should become a central concern due to the effect that aesthetics can have on the user experience. Students will be more likely to engage with a system that is attractive and easy to use. If in the future it appears that the desired appearance cannot be achieved with phpBB, a custom system would need to be built.

Additionally, the prototype should be tested as it was originally designed, to be used throughout a semester. This system prototype was completed at the end of the semester which only allowed it to be tested on the very last day of class. Conducting a pilot test on an individual class would provide evidence of system successes or reveal further problems to be addressed before a final system is created.

If the pilot proves successful (as deemed by the instructor, students, and department chair), the system could be replicated and made available for multiple courses and for other instructors within that department. If the expanded testing continues to demonstrate success, the system could be extended so that every course offered at IIT has its own feedback forum.