Planning for Fall 2009 Online Teaching Questionnaires: What’s been done since the end of Winter Term 2009?

Summary
During the Winter 2009 end-of-term Teaching Questionnaires (TQ) submission period, the production CTools environment experienced serious performance issues that resulted in a decision to stop the TQ process before it was completed. After extensive analysis and research, Information and Technology Services (formerly ITCS, ITSS, and MAIS) and Digital Media Commons staff developed and carried out a very extensive mitigation plan designed to make any premature closure of TQ submissions in the future highly unlikely. This work addressed application improvements, software release management, an upgraded hardware environment, and incorporated significantly enhanced system testing.

Based on the comprehensive mitigation work accomplished since the end of Winter Term—including extensive user and load testing—the CTools team is very confident that there is significantly improved stability and reliability of the entire CTools system, including the TQ tool. Submission of teaching questionnaires during the spring and summer terms has been problem-free, although the number of students attending these terms is much smaller than fall and winter terms. Further, contingency plans established for the coming academic year as well as enhanced systems monitoring while TQ submissions are live provide additional assurance that CTools will be ready to successfully handle the Fall term submissions, however large the response rate.

Mitigation Planning and Implementation
The specific efforts undertaken by the CTools team since the April outage have been directed at both short- and long-term improvements that significantly reduce the risk of any future degradation or unplanned shutdown of CTools, even during periods of extremely high usage. The mitigation plan is being executed in phased releases: the first release spring term was very successful; the next release is scheduled for the end of August in time for the start of fall term and the Engineering midterm TQ process. The team continues to look for additional improvements.

Significant CTools applications improvements resulted by identifying and eliminating code inefficiencies in the TQ tool itself and in others areas of CTools. A change in the way e-mail notifications to students will be processed and sent out, to be ready by fall midterms, will achieve additional load reduction. The CTools applications now have increased stability, robustness, and overall performance. A new database server with more memory has replaced the old server in use in April. Successful load testing using the new hardware has been conducted, including a test that emulates the conditions experienced just before the system failure on April 20. An additional test with a TQ submission rate per minute twice as large as ever experienced also passed, providing additional confidence in the mitigation efforts to date.

Contingency Planning
Over the summer, teams from ITS, DMC and the Office of Exams and Evaluations developed and debated the pros and cons of numerous contingency plans. The team recommended a contingency plan that includes the ability to turn off low priority functions in CTools and the ability to limit the number of users with access to the system. These contingency plans can be implemented at any time during the term, including during the TQ submissions period.
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Ensuring stability and uninterrupted continuity of the essential course management and TQ functions is the paramount objective.

**Efforts to Increase TQ Response Rate**
The Office of Evaluations and Examinations and CRLT have expressed some concerns regarding the less-than-satisfactory response rate of TQ submissions since the system went online. In Fall 2008, the initial term for online TQ, the rate for responses (61%) approximated the paper-based Fall 2007 rate of 63%. The response rate for TQ submission in Winter 2009 was obviously artificially reduced as a function of the cutoff of submissions before the end of the scheduled period. 2009 Spring and Summer terms produced mixed results of a 44% response rate (Spring Term) and 58% (Summer Term). A working group this summer has been reviewing strategies employed by other universities and by U-M faculty to achieve high response rates. There is the intent to provide faculty and departments early in the Fall Term with specific action steps they could consider to improve submission rates. Additional efforts will be directed at improving the awareness of students regarding the importance of submitting Teaching Questionnaires, along with new incentives to increase submission rates.

**Conclusion**
The Provost, the Chief Information Officer, the Office of Evaluations and Examinations, and the CTools Team are very cognizant of the importance of Teaching Questionnaires to faculty and their departments. The questionnaires are also a critical opportunity for students to provide feedback and evaluative comments about courses and instructors at the conclusion of a term. There is a high degree of confidence that the considerable efforts undertaken since the Winter 2009 CTools outage will result in a successful Fall Term TQ submissions process.

For more information about teaching evaluations and related services offered to departments and faculty, go to the Office of Evaluations and Examinations: [http://www.umich.edu/~eande/tq/index.htm](http://www.umich.edu/~eande/tq/index.htm).

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