

Deploying an Open Source, Online Evaluation System: Multiple Experiences

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Overview

- Background
- Evaluation System
- Institutional frameworks
- Pilot results
- Lessons learned

Background

- Course Eval working group within Sakai community formed in 2005
 - Columbia University
 - MIT
 - Virginia Tech
- Original functional specifications based on Program Evaluation System at Columbia (2003) and modification of system deployed at Virginia Tech

Background

- Maryland joined effort in 2006 through joint membership in Learning Technologies Consortium with Virginia Tech
- Cambridge joined project in 2007 when lead developer moved there
- Current java-based Sakai module being developed by Cambridge, Maryland, Michigan and Virginia Tech

Evaluation System

- Provide the ability to run evaluations (course, department, institutional, group) or surveys in a flexible way which meets the needs of most Sakai using institutions

Summary of features

- Basic template authoring system
 - Template – collection of items
 - Items – questions or response statements
 - Scales – Likert or M/C options
- Allow groups (instructors, departments, etc.) to create evaluations/feedback/surveys
 - Ad-hoc groups also supported

Summary of features

- Create evaluations which can be assigned to various groups at once and can be set up in advance
- Sends out notifications and reminders to evaluators which allow one-click access
 - Ability to edit email templates used for notifications and reminders

Summary of features

- Direct links into Sakai for all evaluations are available and login is handled automatically if needed
 - anonymous is available
- Basic online reporting and the ability to export results as CSV, PDF, XLS

Institutional Frameworks

- Virginia Tech
 - Limited production Spring 2007 thru Fall 2008
 - Production Fall 2009
- University of Michigan
 - Pilot Fall 2007
 - Production Fall 2008

Institutional Frameworks

- University of Maryland
 - Pilot Summer 2007
 - Production Spring 2008
- University of Cambridge
 - Pilot Michaelmas 2007
 - Production Fall 2008
- University of Cape Town
 - Pilot Apr/May and August 2008
 - Production Feb/Mar 2009

Virginia Tech

- Large R1 University
- Current process is decentralized
- University Committee on Teaching Evaluation will complete work in Fall 2008
- Committee report to Provost in Spring 2009 will recommend significant changes in evaluation process including a new questionnaire

Virginia Tech

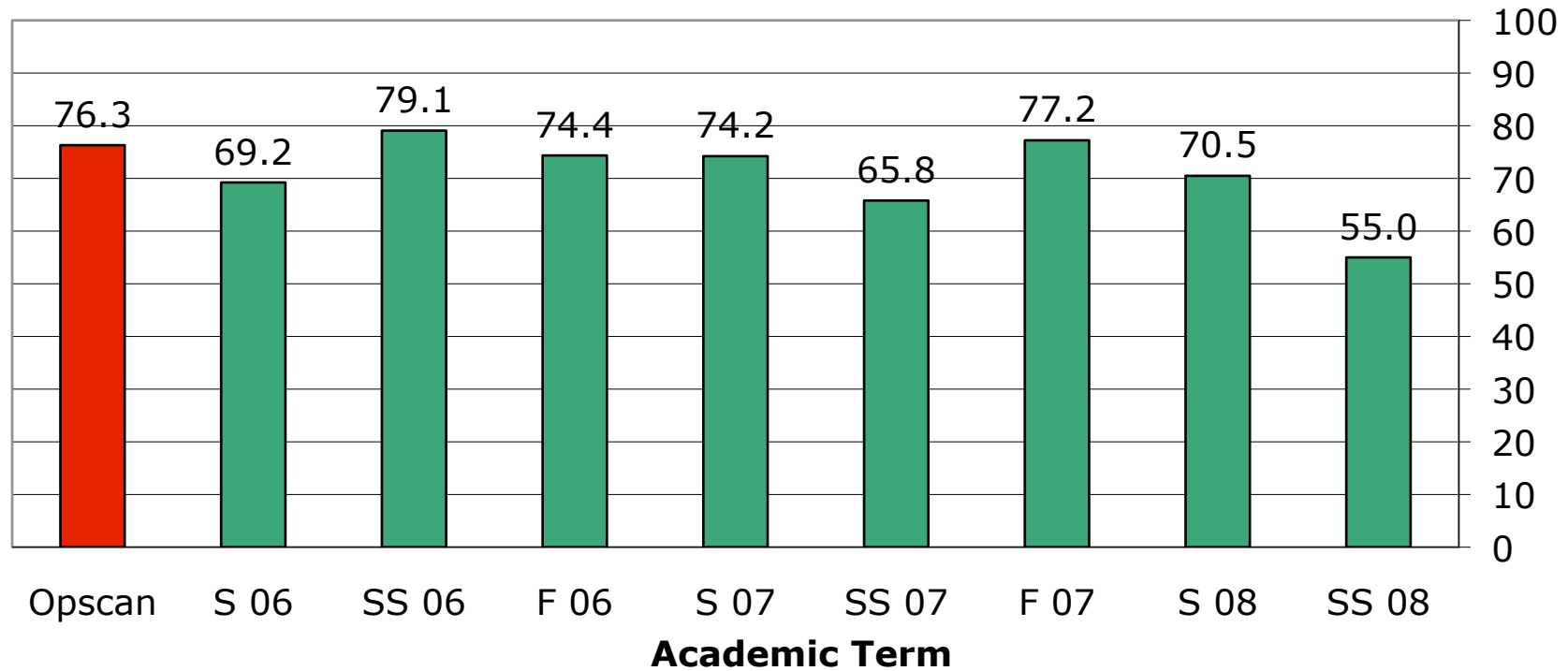
- Currently using both paper-based opscan system and online system
- Availability of new questionnaire may trigger implementation of university-wide migration to online system
- Target date for full implementation is fall 2009

Virginia Tech

- Spring Semester 2008
 - Limited production with volunteer departments
 - 21,778 students received questionnaires
 - 15,351 (70%) students responded
- Response rate is acceptable
- Additional pilot work in fall 2008
- Goal is university-wide acceptance by fall 2009

Virginia Tech

**Student Evaluation of Instruction
Response Rates
Online & Opscan System**



University of Michigan

- Large R1 University
- Research drives tenure + teaching excellence is expected - but evaluations can impact tenure decisions = significant political implications & risks
- Office of Evaluations and Examinations has done paper-based evals for decades
 - managing scope a challenge (“replace everything the paper based system does”)

University of Michigan

- Formal evals only at this point; considering ad hoc later
- Sakai foundation member; deep tech familiarity (may be risk for uninitiated)
- Architectural details:
 - PeopleSoft order entry ->XML data exchange -> Sakai -> PeopleSoft reporting

University of Michigan

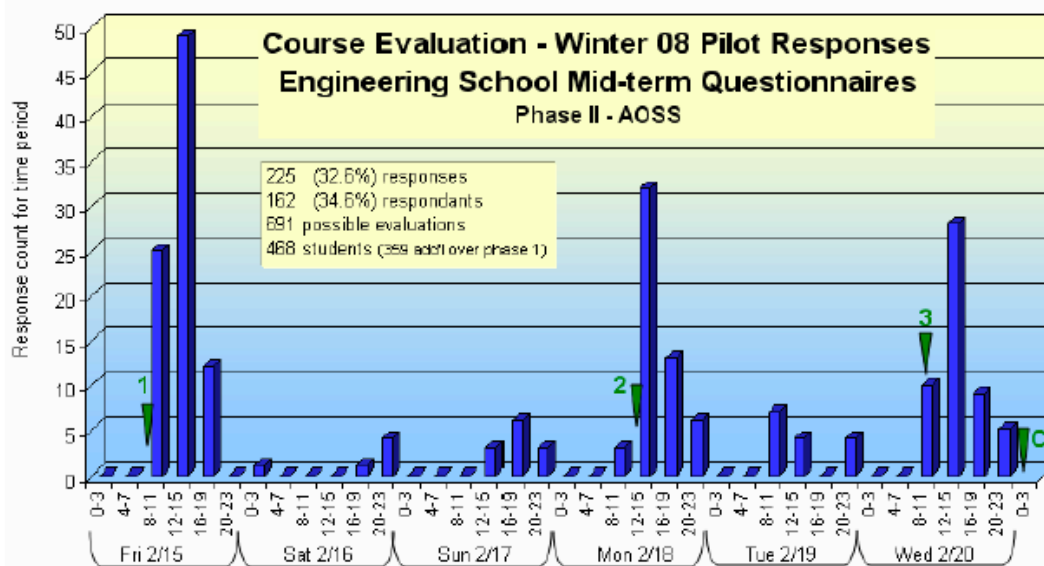
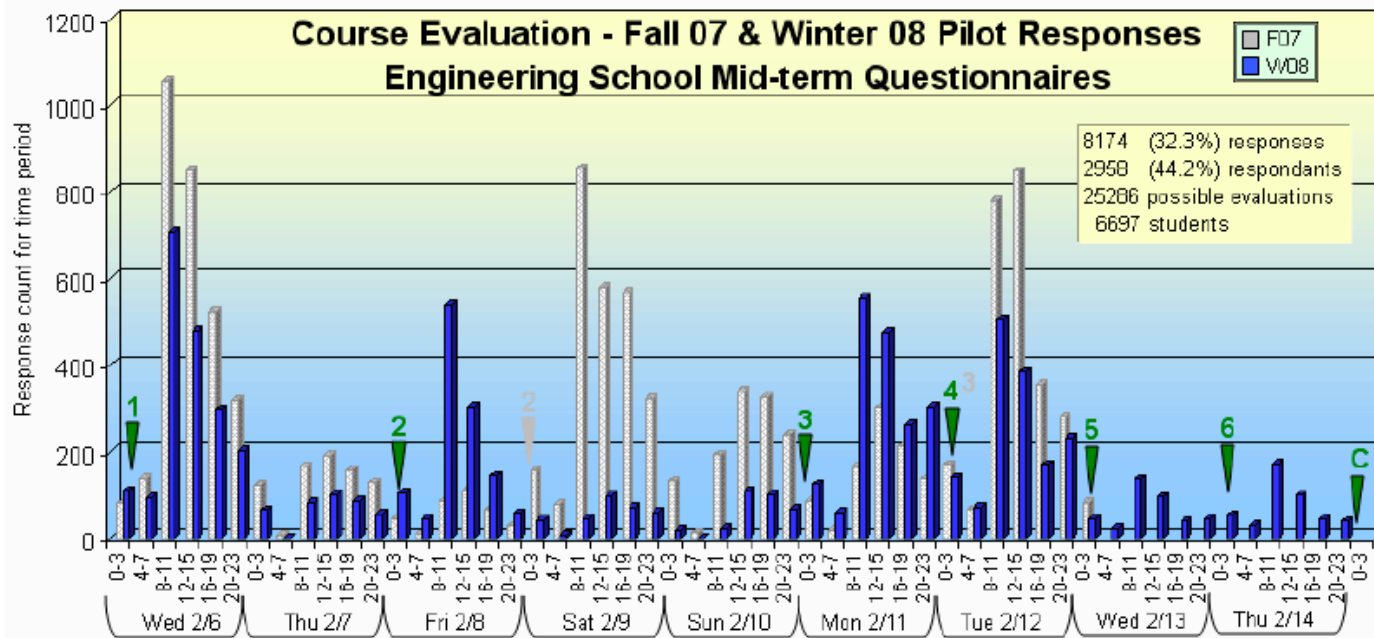
- Two large scale pilots in 07-08 (numbers)
- W08 Details:
 - 25,977 possible evaluations; 8300 submitted for 32.3%
 - 7056 students; 3103 submitted for 44%
- Response rates a significant concern
 - Communication Plan for full rollout

University of Michigan

- Functional tweaks (email handling)
- Full scale production this semester:
 - est. 6000 courses; 50,000+ students
- Scaling concerns (importing data, email processing, data collection); testing now
- Transaction data exchange not in place (manually moving XML files); fully Sakai-based system would not have this problem

University of Michigan

- Email response behavior
 - Reminders drive response but students resent spam...



- 1 - Email to students announcing pilot
- 2 - 1st Reminder email to students
- 3 - 2nd Reminder email to students
- 4 - 3rd Reminder email to students
- 5 - 4th Reminder email to students
- 6 - 4th Reminder email to students
- C - Pilot closed

| Combined stats | | | |
|----------------|----------------|-----------------|---------------|
| | Total possible | Total submitted | Total percent |
| evals | 25977 | 8399 | 32.3% |
| students | 7056 | 3103 | 44.0% |

University of Maryland

- Large R1 University
- University Senate Task Force on Course and Teaching Evaluation report April 2005
- Student Course Evaluation Implementation Committee charged by Provost February 2006
- Final recommendations to University Senate April 2006 (approved)

University of Maryland

- 15 university-wide items defined
 - 6 used for APT purposes
 - 7 are public for student access
 - 1 open ended comment item
 - 1 question about fit in academic plan
 - CORE
 - Major/Certificate/Minor/Program Requirement
 - Elective

University of Maryland

- Access to results
 - Two-tiered incentive system for students
 - Individual student must fill in all of their evaluations the prior semester to gain access to results of public questions for students
 - Course must have 70% return rate for course results to be available to students who satisfy requirement above
 - Instructors can view all items for their own course(s)
 - Administrators can view APT items

University of Maryland

- Sakai Partners Program member
- Architectural details:
 - SIS (proprietary) -> Sakai -> CourseEvalUM Reports (proprietary)

University of Maryland

- Pilot results
 - Summer I 2007 (university items only)
 - 350 course sections
 - 5841 possible evaluations
 - 2378 submitted (40.7%)
 - Summer II 2007(university items only)
 - 250 course sections
 - 4506 possible evaluations
 - 1841 submitted (40.8%)

University of Maryland

- Pilot results (con't)
 - Fall 2007 (university-items only)
 - 5763 course sections
 - 135,629 possible evaluations
 - 84,796 submitted (63%)
 - Spring 2008 (college level and multiple instructor added)
 - 5,279 course sections
 - 123,113 possible evaluations
 - 76,106 submitted (62%)

University of Maryland

- Pilot results (con't)
 - Summer I 2008
 - 443 course sections
 - 7,283 possible evaluations
 - 2,847 submitted (39%)
 - Summer II 2008
 - 395 course sections
 - 7,211 possible evaluations
 - 3,263 submitted (45%)

University of Maryland

- Email “spamming”
 - Similar to Michigan, our students complained about spamming
 - Starting Fall 2007, initial email notification was sent once (one per student) and reminders were sent multiple times (one per evaluation)
- Future plans
 - Add department level items

Lessons Learned

- Open source
 - Benefits
 - Shared developed, shared risk
 - Knowledge gaps in an institution are met by others
 - Retain knowledge base and code now and at any point in the future
 - Risks
 - Different and competing priorities
 - Failure to meet designated timelines

Lessons Learned

- Open source (con't)
 - Challenges
 - Management (Leadership distributed)
 - Not always easy to get access to technical knowledge
 - Communication

Lessons Learned

- Evaluation process
 - Benefits
 - Security – users login to a secure system
 - Authentication – authenticated using institution's middleware infrastructure
 - Authorization – authorized based on SIS data
 - Validation – users may only complete evaluation once
 - Improves efficiency - does not infringe on class time
 - Cost savings - paper, processing time, handling and processing
 - Rapid turnaround of results
 - Higher quality student comments

Lessons Learned

- Evaluation process (con't)
 - Challenges
 - Confidentiality vs. anonymity
 - FOIA concerns and constraints
 - Change management (getting word to faculty)
 - Getting to full automation
 - Competing priorities/scope creep

For more information

- Sakai Evaluation System:
<http://confluence.sakaiproject.org/confluence/display/EVALSYS/Home>
- Virginia Tech Evaluation System:
<https://webapps.es.vt.edu/confluence/display/DEV/Evaluation+System>
- University of Michigan
<http://www.umich.edu/~eande/tq/onlineevals.htm>
- University of Maryland CourseEvalUM:
https://www.irpa.umd.edu/Assessment/crs_eval.shtml