Moving from a Paper-Based System to an Online Process for Student Opinion of Teaching

Final Recommendation to the Provost

Provost’s Advisory Council on Instructional Excellence
March 23, 2012
Overview

In the Fall of 2010 Provost Patricia Beeson charged her Advisory Council on Instructional Excellence (ACIE) with studying and then making a recommendation about moving the current process for gathering student opinions of teaching to an online system. During the 2010-11 year, the Best Practices committee reviewed the options for a move to online evaluations. In the summer of 2011 the Provost approved the Council’s recommendation to conduct a pilot study during the Fall Term. The pilot concluded in December 2011 and the data analysis was completed in February 2012. The Best Practices committee brings the following recommendation forward for full council discussion in February 2012.

Research conducted in AY 2010-11

During the AY 2010-11, the Center for Instructional Development and Distance Education, on behalf of ACIE, conducted background research about the benefits and concerns involved in moving to online evaluations. This work involved a brief review of the literature, meetings with the director of the Office of Measurement and Evaluation of Teaching (OMET), interviews with key personnel at other institutions, invited presentations, and surveys of peer institutions.

The findings indicated that most peer institutions moved to online evaluations in the mid-2000’s, that the advantages over paper included greater efficiency, quicker turn-around of results, cost-savings to the institution, flexibility, class time savings, easier revision and modification of surveys, and reduced environmental impact. Most institutions reported no significant difference in mean ratings, but did report a general drop in overall response rates.

The Council members recommended a pilot project, whose scope was limited to changing the mode of the survey delivery (from paper to online.) A specific recommendation was made to not change the instrument itself at the same time, due to difficulty in discerning impacts or differences from online evaluation vs. other variables of change. We learned that making these two major changes simultaneously caused problems at other institutions, and colleagues at other universities supported our decision and encouraged us to change only one variable.

Our research found that the most important means to increase response rates to online surveys was to explain to students why their input was important and how it would be used. This seemed to make the biggest impact on increasing response. While other methods such as incentives have been tried at other schools, they either weren’t recommended or our committee chose not to use them.

Finally, moving to online would produce cost savings for OMET. While savings in staff are anticipated when the online evaluations are fully implemented, short-term savings are anticipated in paper, supplies and student labor. OMET has recently updated its cost and savings estimates (conservative) for 2012 as follows:

| Labor (students) | $22,000 |
| Paper and supplies | $13,000 |

**Expected Yearly Savings** $35,000

The full report and recommendation is contained in Appendix A: Moving from a Paper-Based System to an Online Process for Student Opinion of Teaching, May 12, 2011.

Pilot Project

The pilot study compared survey completion rates, distribution of responses and average ratings of matching pairs of classes taught by faculty pilot participants. A class surveyed on paper during the
last AY 2010-11 was matched with the same class that was surveyed online during the fall term 2011 (AY 2011-12).

Participants were determined based on recommendation from ACIE members, suggestions of the Sr. Associate Dean of the Dietrich School of Arts and Sciences, or by request. Only tenured faculty or non-tenure stream faculty were eligible for the pilot. The following schools and departments were represented in the pilot:

- Dietrich School of Arts and Sciences: Chemistry, Economics, English, HAA, and Psychology
- Swanson School of Engineering
- Graduate School of Public and International Affairs
- School of Education

A total of 88 instructors participated in the study, with 133 classes surveyed online. Of these, a total of 43 classes were taught by the same instructor the previous academic year using the same survey form on the Oakland campus (Oakland Matched Pairs.) Ten instructors on the Greensburg campus with a total of 12 classes had one section of each class surveyed online and the other section surveyed in-class using paper forms during the Fall term 2011.

Results of Pilot

OMET staff as well as ACIE member Professor Christian Schunn analyzed the data from the pilot study and reported the following findings:

1. All methods of data analysis found that there was no significant difference in average teacher ratings on any OMET survey item between results obtained through online surveys and results obtained through paper-based surveys. Table 4 from the OMET analysis illustrates this for the Oakland Matched Pairs:

<table>
<thead>
<tr>
<th>Item</th>
<th>Method of Administration</th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 The instructor presented the course in an organized manner</td>
<td>Online</td>
<td>4.10</td>
<td>43</td>
<td>.46</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.09</td>
<td>43</td>
<td>.49</td>
<td>.08</td>
</tr>
<tr>
<td>2.2 The instructor stimulated my thinking</td>
<td>Online</td>
<td>4.03</td>
<td>43</td>
<td>.45</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>3.99</td>
<td>43</td>
<td>.46</td>
<td>.07</td>
</tr>
<tr>
<td>2.3 The instructor evaluated my work fairly</td>
<td>Online</td>
<td>4.15</td>
<td>43</td>
<td>.48</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.17</td>
<td>43</td>
<td>.42</td>
<td>.06</td>
</tr>
<tr>
<td>2.4 The instructor made good use of examples to clarify concepts</td>
<td>Online</td>
<td>4.14</td>
<td>43</td>
<td>.38</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.09</td>
<td>43</td>
<td>.50</td>
<td>.08</td>
</tr>
<tr>
<td>2.5 The instructor maintained a good learning environment</td>
<td>Online</td>
<td>4.25</td>
<td>43</td>
<td>.38</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.24</td>
<td>43</td>
<td>.46</td>
<td>.07</td>
</tr>
<tr>
<td>2.7 Express your judgment of the instructor’s overall teaching effectiveness</td>
<td>Online</td>
<td>4.01</td>
<td>43</td>
<td>.48</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.02</td>
<td>43</td>
<td>.48</td>
<td>.07</td>
</tr>
</tbody>
</table>
2. Average response rate was found to be significantly lower for online surveys than for paper surveys in all analyses performed. (In the Oakland matched pairs study the rate was 75% for paper and 53% for online.)

![](Response_Rate_Online_vs_Paper_for_All_Surveys.png)

3. Instructors appear to get about the same amount of written feedback across the two methods of evaluation. Analysis shows that there appears to be no net benefit or harm resulting from the shift from in-class paper to online evaluations in terms of amount of feedback to the instructor.

4. In a follow-up survey of participating faculty, the open-ended comments indicated the overall perception of the instructors toward online surveys was positive, with a few indicating that they prefer the paper in-class surveys. When asked about their satisfaction with response rates, the most frequent rating was “Very Satisfied” and the second most frequent rating was “Somewhat Dissatisfied.”

![](Satisfaction_with_Online_Response_Rate.png)

5. There was no effect at all of format on teaching rating means, with a mean of exactly 4.03 (1–5 scale of overall teaching effectiveness) for online and paper formats.
6. Instructors receiving high ratings tend to receive high ratings in either format and instructors receiving low ratings tend to receive low ratings in either format.

7. Overall, there was no significant effect of format on the spread of ratings.

8. The drop in response rate did not appear to change mean ratings. However, in small classes, lower response rates could add more variability in the mean for each class.

9. As a follow-up, in February OMET provided Schunn with additional data about the pilot classes from 2009-10, in order to look at stability of ratings from year to year, including when done solely on paper. Paper-to-paper mean ratings were compared and found to be basically the same as paper-to-online (paper-to-paper methods correlated at r=.5 and paper-to-online at r=.6). Based on this additional analysis, Schunn concluded that the move to online does not disrupt the overall mean that an instructor received, and the change to online does not appear to have an additional influence on changes in ratings.

Note: Faculty who participated in the pilot were offered the ability to continue with online surveys in Spring 2012. Data from those surveys will be available for analysis after Spring Term has concluded.

**Recommendation**

After careful consideration, the Provost’s Advisory Council on Instructional Excellence makes the following recommendation to the Provost:

1. *The University of Pittsburgh should move from paper to online student opinion of teaching surveys, beginning in Fall 2012.*
2. *Paper evaluations should be offered as an option for a period of one year.*
3. *A formal plan should be developed to communicate to faculty and students about the online method of survey administration, and about the importance of student participation in the process. Strategies for encouraging student response should be shared with faculty.*

This recommendation is based upon the results of the Pilot Study conducted in the Fall of 2011 and analyzed in Spring of 2012 as well as the research conducted by the Center for Instructional Development and Distance Education in the 2010-11 academic year.
Appendix A

Moving from a Paper-Based System to an Online Process for Student Opinion of Teaching, May 12, 2011
Moving from a Paper-Based System
to an Online Process for
Student Opinion of Teaching

Recommendation to the Provost
Submitted by Provost’s Advisory Committee on Instructional Excellence
May 12, 2011
In the Fall of 2010 Provost Patricia Beeson charged her Advisory Committee on Instructional Excellence (ACIE) with examining making a recommendation about moving the current process for gathering student opinions of teaching to an online system. This summary of the advantages and challenges of moving to an online approach, and the proposed recommendation for the University of Pittsburgh, is based on work of the ACIE Best Practices Committee conducted during Fall Term 2010 and early Spring Term 2011. This work involved a brief review of the literature, meetings with the director of the Office of Measurement and Evaluation of Teaching (OMET), interviews with key personnel at Penn State, Carnegie Mellon University, and Philadelphia University by the director of the Center for Instructional Development and Distance Education (CIDDE), a presentation to the committee by the project leader for the online course evaluation implementation at the University of Maryland, published presentations of the experiences of other universities, and a survey administered to member institutions from the American Association of Universities, the Professional and Organizational Development Network and the Learning Technology Consortium by CIDDE. Detailed documentation of this research is available from CIDDE (serving as staff to this committee.)

The results of our exploration of moving to an online instrument for student ratings of teaching can be summarized as follows:

<table>
<thead>
<tr>
<th>Advantages to the University</th>
<th>Common Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater efficiency in the process</td>
<td>Lower response rates</td>
</tr>
<tr>
<td>Reliable distribution</td>
<td>Faculty buy-in</td>
</tr>
<tr>
<td>Immediate access to results</td>
<td>Assuring anonymity</td>
</tr>
<tr>
<td>No need to use class time</td>
<td>Assuring privacy</td>
</tr>
<tr>
<td>Opportunity for everyone’s feedback</td>
<td></td>
</tr>
<tr>
<td>Analysis-friendly</td>
<td></td>
</tr>
<tr>
<td>Assured integrity of the feedback</td>
<td></td>
</tr>
<tr>
<td>More substantive written responses</td>
<td></td>
</tr>
<tr>
<td>Easier revision and modification of surveys</td>
<td></td>
</tr>
<tr>
<td>More cost-effective</td>
<td></td>
</tr>
<tr>
<td>Flexible and easy to change</td>
<td></td>
</tr>
<tr>
<td>Reduced environmental impact (less paper)</td>
<td></td>
</tr>
</tbody>
</table>

**Discussion of Advantages to the University**

Universities generally move to online course evaluations for greater reliability in the distribution of evaluations and faster access to the results. Since students can take the survey at their convenience, all students in a class have the opportunity to respond regardless of their presence or absence in a class on any particular day, and class time is typically not taken for survey administration. Aggregate data is easier to analyze on a school or programmatic level. If the system used authenticates the student consistent with the institution’s online registration or email, then the integrity of the feedback is consistent with a system already in place. Interestingly, faculty report that online evaluations result in richer open-ended feedback, presumably because students are not confined to a set period of time to complete the survey and therefore take advantage of the reflective environment for their comments. Web-based
evaluation lends itself to easier revision and customization of the items on the survey. Increasingly, institutions are attracted to online student evaluations of teaching due to the cost-effectiveness of this means of survey delivery as well as the reduced environmental impact through reduction in paper processing.

Discussion of Common Concerns

Because student response rates are typically lower for online surveys (generally 60-70% reported among schools where it is not mandatory), institutions often create incentives and deliver reminders for students to take the surveys. Response rates generally rise as schools make increasing use of online evaluations of teaching. Donmeyer (2004) suggests that students are more likely to complete an opinion survey if it follows a mid-term survey and feedback results in the improvement of teaching. Some institutions have noted higher response rates if faculty explain to the students why the survey is being conducted and why their responses are important (including Carnegie Mellon, Maryland, Penn State). Several studies have demonstrated comparable results when comparing online and paper scores, and these data can be helpful in showing faculty that the two modes can yield comparable results. To address potential concerns with privacy and anonymity, both the manual and electronic processes must be designed to adhere to university policies and practices (so that the institution can assure the community that responses are not directly traced to the respondent.)

University of Pittsburgh Considerations

Campus Interest

A number of conversations with academic leadership at the University of Pittsburgh indicate general interest in exploring further an online process. The School of Dental Medicine has a project well underway (including defining needs and assessing commercial software products) to implement online surveys in that school. Dental Medicine, SIS, CGS, Engineering and others have indicated interest in participating in a pilot program. The School of Medicine has its own process and currently uses CourseEval, which is a popular commercial product. Discussion with campus constituents has shown desire for changes to both the current process the university administers and in some cases to the existing instrument itself. OMET has administered a limited number of online surveys using its current software, Class Climate. (During Fall 2010, approximately 230 courses evaluated had a mean response rate of 49%, and a range of 4-100%.) The University currently spends roughly between $80K and $90K annually to administer paper-based evaluations via OMET. Included in the cost is approximately $60K in labor, the balance spent on paper and support for the software.

ACIE Discussion

Discussion within the ACIE Best Practices committee as well as the full Council has focused on the following points:

• Concerns about achieving adequate response rates.
• Maintaining the current instrument: there is general agreement that we were charged with making a recommendation about moving the current process online and not charged with making a recommendation about changing the current survey instrument.
• Maintaining anonymity/confidentiality, both of the individual student data and the overall results, in accordance with the policies and practices that vary among schools at Pitt with regard to dissemination of the data.
• Maintaining the current practice of making completion of the evaluation optional for students.
• Conducting a pilot implementation with faculty who are not in the tenure stream or who have already attained tenure, so as not to in any way affect the tenure and promotion process.

Recommendation

After careful consideration of the information that has been gathered to date, lively discussion of the benefits and concerns of moving to online student evaluations of teaching, and discussions with the director of OMET, the Provost’s Advisory Council on Instructional Excellence makes the following recommendation to the Provost:

The University of Pittsburgh should conduct a formal pilot study of online student opinions of teaching. The study should have the following goals:

1. Review and understand any differences between online and paper course evaluations
   a. Survey completion rates
   b. Distribution of responses
   c. Average ratings
2. Explore student and instructor perceptions of online evaluations
3. Assess the implementation process and develop an implementation plan and timetable for University-wide deployment

Suggested implementation strategies:

• Do not change the current survey instrument.
• Use the existing Class Climate system to conduct the pilot (given that Class Climate is currently used to conduct online evaluations in certain circumstances.)
• Approach the School of Engineering, Chemistry department, and a few large lecture courses as potential pilot areas.
• Consider AY 2011-12 as a timeframe for conducting the pilot.
• Include faculty who are not in the tenure stream or who already have achieved tenure.
• Maintain the current practice of making completion of the survey optional.
Appendix B

*Online Pilot Study Report, February, 2012*
Moving from a Paper-Based System
to an Online Process for
Student Opinion of Teaching

Online Pilot Study Report

Nancy Reilly, Elaine Rubinstein Ph.D., Lisa Votodian
Office of Measurement and Evaluation of Teaching
February, 2012
Introduction

Currently paper format is used to administer student evaluation of teaching questionnaires for on-campus classes at the University of Pittsburgh. In the Fall of 2010 Provost Patricia Beeson charged her Advisory Committee on Instructional Excellence (ACIE) Best Practices Committee with collecting information and making a recommendation about moving the current process to an online system.

After careful consideration of the information that was gathered, the Best Practices Committee strongly recommended to full Council to discuss and approve the recommendation that

The University of Pittsburgh should conduct a formal pilot study of online student opinions of teaching. The study should have the following goals:

a. Review and understand any differences between online and paper course evaluations
   i. Survey completion rates
   ii. Distribution of responses
   iii. Average ratings
b. Explore student and instructor perceptions of online evaluations
c. Assess the implementation process and develop an implementation plan and timetable for University-wide deployment

Suggested implementation strategies:

- Use the existing Class Climate system to conduct the pilot (given that Class Climate is currently used to conduct online evaluations in certain circumstances.)
- Approach the School of Engineering, Chemistry department, and a few large lecture courses as potential pilot areas, given interest expressed and the variety of types of classes that can be evaluated.
- Consider AY 2011-12 as a timeframe for conducting the pilot.

The full Council approved this recommendation by the Best Practices Committee. Provost Beeson approved the recommendation in June 2011.

The pilot study compared survey completion rates, distribution of responses and average ratings of matching pairs of classes taught by faculty pilot participants. A class surveyed on paper during the last AY 2010-11 was matched with the same class that was surveyed online during the fall term 2011 (AY 2011-12). Participants included faculty from both Oakland and Greensburg campuses. The purpose of the study is to provide Provost Beeson with information regarding online surveys at the University of Pittsburgh.
The Research Questions are:

1. Is there a difference in response rate between evaluation of teaching surveys administered in class on paper vs. online?
2. Is there a difference in average ratings of Overall Teaching Effectiveness Rating between evaluation of teaching surveys administered in class on paper vs. online?
3. Is there a difference in the distribution of responses between evaluation of teaching surveys administered in class on paper vs. online?

Methods

This was a quasi-experimental, descriptive study.

Participants

The participants for this pilot study did so voluntarily. Participating faculty either had already attained tenure or were not in the tenure stream. Participants had the option of having any or all of their classes surveyed online. Some participants chose to have one class surveyed online and another done in class. Both undergraduate and graduate courses were part of the study. Classes consisting of fewer than 100 students and over 100 students were included.

Potential participating departments were determined either by the recommendation of the ACIE, by the suggestion of the Senior Associate Dean of the School of Arts & Sciences, or by request. Cynthia Golden, Director of CIDDE and staff liaison to ACIE, and Nancy Reilly, Director of OMET, conducted meetings with the chairs or their representatives from the Departments of Chemistry, Economics, English, HAA, and Psychology in the School of Arts & Sciences, the Swanson School of Engineering, and the Greensburg campus. Information about the Pilot Study and the online survey process was presented at these meetings. Permission was also received from representatives in GSPIA and the Dean of the School of Education.

Self-selection bias in requesting surveys and in participating in the pilot is noted.
**Sample size**

A total of 88 instructors participated in the study. These 88 participants had 133 classes surveyed online. Thirty-three of these instructors with a total of 43 classes had taught the same course the previous academic year using the same survey form on the Oakland campus. Ten instructors on the Greensburg campus with a total of 12 classes had one section of each class surveyed online and the other section surveyed in-class using paper forms during the Fall term 2011.

**Procedures**

Confirmation letters are routinely sent through Campus Mail to everyone that requests a survey. Instructors who participated in the online pilot study received the standard online Confirmation Letter (*Appendix A*) along with a letter (*Appendix B*) providing details about the study in the same envelope. In addition, an email (*Appendix C*) combining the information in the two letters was sent to the pilot participants. Confirmation letters included Talking Points designed to aid instructors in encouraging students to participate. This was done in October 2011.

The online survey period began on November 14, 2011. Emails were sent to students whose instructors were part of the pilot and had requested online surveys.

Class Climate generated email messages to students in each class. The email had the name of the instructor and course number in the subject line. Within the email was a link to a survey for that class with an explanation that this is a Student Opinion of Teaching Survey. This email was not linked with BlackBoard.

Instructors also received an email from OMET notifying them that the online period had started and that emails were sent to their students. The email to the instructors was done manually because Class Climate “does not have the functionality that allows one to notify the instructor that a survey has been deployed” (Scantron Support). OMET has formally requested that this feature be added to Class Climate. On November 8, 2011, OMET was notified that Scantron had added this suggestion to their project list. Whereas OMET does not have the capability to manually send email to faculty on a large scale, OMET did send an email to the relatively small number of faculty who participated in the pilot study.

Once the student completed the Student Opinion of Teaching Survey for a class, the link to the survey became inactive. Students who had not yet competed a survey received weekly reminders until the survey was completed or up to the end of the survey period on December 9, 2011.

**Instruments**
The survey form (Appendix D) was the same form used for in-class paper surveys. The form includes both quantitative and qualitative questions. The items in the Teaching Evaluation section of the form are:

2.1 The instructor presented the course in an organized manner.
2.2 The instructor stimulated my thinking.
2.3 The instructor evaluated my work fairly.
2.4 The instructor made good use of examples to clarify concepts.
2.5 The instructor maintained a good learning environment.
2.6 The instructor was accessible to students. (Do not answer if no basis to judge)
2.7 Express your judgment of the instructor’s overall teaching effectiveness

Instructors in the pilot were able to add Instructor Optional Questions in the same way they would add them for an in-class survey. These IOQs were not part of the analysis.

Generalizability

This was a descriptive study, which allowed for the comparison outcomes of in-class and online surveys at a particular point in time for a self-selected sample. However, neither the results of this pilot study nor the results of additional studies that may be done at a later point should be used to draw conclusions about future ratings and response rates.

Data Analysis

Data were analyzed using several subsets of the pilot data. Analysis for Research Questions 1 to 3 made use of a subset of the data from the School of Arts and Sciences and the School of Engineering, which will be referred to as the “Matched Pairs Sample.” Data from only these two Schools were included in this subset because the School of Arts and Sciences and the School of Engineering use a common form of the survey, while GSPIA and the School of Education use different survey forms (Appendix D). This subset only included cases where a course surveyed online in Fall, 2011 could be paired with the same course taught by the same instructor and surveyed on paper in AY 2010-2011.

Matched pairs t-tests were used to address Research Questions 1 and 2. Thirty-three instructors teaching a total of 43 courses were eligible to be part of the matched pairs t-test analysis on the Oakland campus.

The survey form used to collect data contains twelve items. Six of the twelve items were used for the matched pairs t-tests. They are items 2.1 – 2.5 and 2.7.
Item 2.6 was not included because only students who attempted to contact the instructor were to answer. Item 2.7 is the overall teaching effectiveness item. If a class was taught both in the fall and spring terms of 2010-11, the class taught in the spring was chosen. If a class was taught more than once during either term, the class to be included was determined by the flip of a coin. If a course was taught more than once during the fall term 2011 but was only taught once in 2010-11, the fall 2011 course to be used was again be determined by a flip of a coin. If two pairs of courses were taught in both academic years the pairs to be used were determined by a flip of a coin.

Matching was also possible for data from Greensburg, since all participating instructors taught two sections of the same course in Fall, 2011, and requested an online survey for one section and a paper survey for the other. A subset of these instructors had also requested a paper survey for the same course in AY 2010-2011.

An assumption of the matched pairs t-test is that scores are normally distributed in the population. We had reason to expect that this assumption would not be met because distributions of responses are typically negatively skewed, that is, ratings at the higher end of the scale are more frequent than ratings at the lower end of the scale. Therefore, a nonparametric test, the matched-pairs Wilcoxon test was also used to test for significance. Nonparametric tests make no assumptions about the form of the underlying distribution. To corroborate findings of the matched pairs t-tests, comparisons to address Research Questions 1 and 2 were also carried out using the match-pairs Wilcoxon test. Consistent results were obtained in all cases.

The software program used for the analysis was SPSS.

Data obtained from classes that were part of the online pilot study but did not meet the criteria for the matched-pairs t-test analysis were analyzed separately using descriptive statistics such as frequencies and measures of central tendency. This entire sample of 88 instructors and 133 courses was used in the analysis of overall response rates.

For the analysis of the responses to the four open-ended questions, a 10% random sample of the surveys was selected and the total number of words in all responses was counted. The total number of words contained in responses to paper and online surveys was compared. No attempt was made to evaluate the quality of responses to paper and online surveys, since individual instructors are in the best position to make judgments about quality.
Results

Preliminary Study

Before data for the matched-pairs analysis was available, a preliminary study was carried out making use of available data from Fall, 2010 and Spring, 2011. During AY 2010-11 a total of 255 surveys were administered online for classes in the School of Arts and Sciences and the School of Engineering. Online administration was used for classes taught online, for classes held off-campus, and for classes where special circumstances prevented the administration of paper surveys.

Results from paper surveys of approximately 2,500 classes in AY 2010-11 were available. To achieve equivalent sample sizes for online and paper surveys, a random sample of 254 paper surveys was selected using the “Random Sample” feature in SPSS software.

The following exclusion criteria were applied when selecting data for analysis. Individual surveys were excluded if the student completed fewer than four of the following six items: 2.1, 2.2, 2.3, 2.4, 2.5, and 2.7, or if item 2.7 was not completed. (Item 2.6 was not considered since it only applies to students who attempted to contact the instructor). Classes were excluded if fewer than five participants completed surveys.

The average response rate for the surveys completed on paper during the 2010-11 AY was 75%. The average response rate for the surveys completed online during the same AY via email was 39%. This difference was statistically significant.

Average ratings on questions 2.1 through 2.5 and 2.7 and average response rates were compared for the paper and online samples using independent-samples t-tests. The distributions of responses for the selected items were also compared descriptively.

Table 1 provides descriptive statistics for the selected survey items. There were no statistically significant differences for items 2.2, 2.3, 2.4, 2.5, and 2.7 between the two administration methods. There was a significant difference for item 2.1 “The instructor presented the course in an organized manner.” with the online survey method having the higher mean rating of 4.14 vs. 4.00 for paper.
Table 1  Preliminary Study

<table>
<thead>
<tr>
<th>Item</th>
<th>Method of Administration</th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Online</td>
<td>4.14</td>
<td>255</td>
<td>0.70</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.01</td>
<td>254</td>
<td>0.78</td>
<td>0.05</td>
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<tr>
<td>2.2</td>
<td>Online</td>
<td>4.11</td>
<td>255</td>
<td>0.62</td>
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<td>Paper</td>
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<td>0.46</td>
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<tr>
<td>2.3</td>
<td>Online</td>
<td>4.31</td>
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<tr>
<td>2.4</td>
<td>Online</td>
<td>4.20</td>
<td>255</td>
<td>0.63</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.17</td>
<td>254</td>
<td>0.50</td>
<td>0.03</td>
</tr>
<tr>
<td>2.5</td>
<td>Online</td>
<td>4.29</td>
<td>255</td>
<td>0.60</td>
<td>0.04</td>
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<td>254</td>
<td>0.42</td>
<td>0.03</td>
</tr>
<tr>
<td>2.7</td>
<td>Online</td>
<td>4.10</td>
<td>255</td>
<td>0.67</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.09</td>
<td>254</td>
<td>0.50</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Examination of the distribution of responses (Appendix E) showed higher frequencies of ratings at the lowest and highest end of the five-point response scale (ratings of 1 and 5) for online surveys than for paper surveys on all six items. Figure 1 shows the distribution of responses for the overall teaching effectiveness item 2.7.

Figure 1  Preliminary Study

![Distribution of Responses](image)

Pilot – All Participants

Table 2 shows the breakdown of instructors (n=88) and classes (n=133) by School for the total sample who participated in the Online Pilot Study.
Table 2  All Participants in Online Pilot Study

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>Number of Instructors</th>
<th>Number of Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Sciences</td>
<td>42</td>
<td>56</td>
</tr>
<tr>
<td>Education</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>Engineering</td>
<td>23</td>
<td>32</td>
</tr>
<tr>
<td>GSPIA</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Recitations</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Greensburg</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>133</td>
<td>88</td>
</tr>
</tbody>
</table>

Table 3 shows the average response rate by School and overall.

Table 3  Average Response Rates – All Participants

<table>
<thead>
<tr>
<th>School</th>
<th>Mean Response Rate</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Sciences</td>
<td>50%</td>
<td>12%</td>
<td>19%</td>
<td>80%</td>
</tr>
<tr>
<td>Education</td>
<td>60%</td>
<td>15%</td>
<td>31%</td>
<td>86%</td>
</tr>
<tr>
<td>Engineering</td>
<td>57%</td>
<td>13%</td>
<td>36%</td>
<td>89%</td>
</tr>
<tr>
<td>GSPIA</td>
<td>65%</td>
<td>14%</td>
<td>45%</td>
<td>89%</td>
</tr>
<tr>
<td>Recitations</td>
<td>64%</td>
<td>13%</td>
<td>42%</td>
<td>80%</td>
</tr>
<tr>
<td>Greensburg</td>
<td>49%</td>
<td>12%</td>
<td>31%</td>
<td>70%</td>
</tr>
<tr>
<td>Overall</td>
<td>54%</td>
<td>14%</td>
<td>19%</td>
<td>89%</td>
</tr>
</tbody>
</table>

**Pilot - Matching**

Out of these 78 participants and 121 classes surveyed on the Oakland campus online in Fall, 2011 there were 43 classes taught by the same professor in the same department and associated with the same course number that were surveyed on paper in class during the 2010-11 AY. These 43 classes were included in the matched-pairs t-test analysis. The same exclusions that were used in the Preliminary Study were applied for the Pilot Matching analysis. Other than method of administration, the only known difference between the matched pairs was in the identity of students who completed the forms, although it must be acknowledged that instructors’ teaching practices may change from one semester to the next.

The average response rate for the surveys completed on paper during the 2010-11 AY was 76%. The average response rate for the surveys completed online during the fall term 2011 was 53%. This is a statistically significant difference. However, when comparing results of the Online Pilot Study to results of the Preliminary Study, it can be seen that while the response rate for paper surveys stayed relatively the same (76% vs. 75%), the response rate for online surveys rose considerably from 2010-11 AY to Fall 2011 (39% vs. 53%).

Dependent t-tests were performed on six teaching evaluation items on the form. There were no statistical significance found between the means for the surveys.
completed on paper vs. the surveys administered online for any of the six items. Table 4 displays descriptive statistics for both methods of administration.

<table>
<thead>
<tr>
<th>Item</th>
<th>Method of Administration</th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Online</td>
<td>4.10</td>
<td>43</td>
<td>.46</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.09</td>
<td>43</td>
<td>.49</td>
<td>.08</td>
</tr>
<tr>
<td>2.2</td>
<td>Online</td>
<td>4.03</td>
<td>43</td>
<td>.45</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>3.99</td>
<td>43</td>
<td>.46</td>
<td>.07</td>
</tr>
<tr>
<td>2.3</td>
<td>Online</td>
<td>4.15</td>
<td>43</td>
<td>.48</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.17</td>
<td>43</td>
<td>.42</td>
<td>.06</td>
</tr>
<tr>
<td>2.4</td>
<td>Online</td>
<td>4.14</td>
<td>43</td>
<td>.38</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.09</td>
<td>43</td>
<td>.50</td>
<td>.08</td>
</tr>
<tr>
<td>2.5</td>
<td>Online</td>
<td>4.25</td>
<td>43</td>
<td>.38</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.24</td>
<td>43</td>
<td>.46</td>
<td>.07</td>
</tr>
<tr>
<td>2.7</td>
<td>Online</td>
<td>4.01</td>
<td>43</td>
<td>.48</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.02</td>
<td>43</td>
<td>.48</td>
<td>.07</td>
</tr>
</tbody>
</table>

An examination of the distributions of responses (Appendix F) for the two methods of survey administration found higher frequencies of ratings at the extremes of the five-point scale (ratings of 1 and 5) for online than for paper surveys. Figure 2 shows the distribution of responses for the overall teaching effectiveness item 2.7.

**Figure 2 Oakland Matched Pairs**

![Distribution of Responses](image)
Pilot – Greensburg

An Online Survey Pilot was conducted concurrently on the Greensburg campus. Ten instructors with a total of twelve classes participated. Participants included faculty that were either already tenured or were not in the tenure system. All of these instructors taught two sections of the same course in Fall, 2011, and requested a paper survey for one of the sections, and an online survey for the other. In addition, seven of the instructors had requested a paper survey for the same course in AY 2010-11, which made it possible for results of two paper administrations and one online administration to be compared. Data analysis for Greensburg includes matching classes that were surveyed in-class, on paper in the 2010-11 AY and Fall 2011, and surveyed online Fall 2011. The same method, procedure and instruments used on the Oakland campus were used for Greensburg’s participants.

Means for survey items based on online and paper surveys of the 12 courses are presented in Table 5. No significant difference between means was found for any of the items.

Table 5 Greensburg Matched Pairs

<table>
<thead>
<tr>
<th>Item</th>
<th>Method of Administration</th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Online</td>
<td>4.06</td>
<td>12</td>
<td>.48</td>
<td>.14</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.01</td>
<td>12</td>
<td>.48</td>
<td>.14</td>
</tr>
<tr>
<td>2.2</td>
<td>Online</td>
<td>3.80</td>
<td>12</td>
<td>.50</td>
<td>.15</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>3.70</td>
<td>12</td>
<td>.56</td>
<td>.16</td>
</tr>
<tr>
<td>2.3</td>
<td>Online</td>
<td>4.18</td>
<td>12</td>
<td>.36</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.16</td>
<td>12</td>
<td>.33</td>
<td>.10</td>
</tr>
<tr>
<td>2.4</td>
<td>Online</td>
<td>3.99</td>
<td>12</td>
<td>.57</td>
<td>.16</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>3.89</td>
<td>12</td>
<td>.65</td>
<td>.19</td>
</tr>
<tr>
<td>2.5</td>
<td>Online</td>
<td>4.09</td>
<td>12</td>
<td>.48</td>
<td>.14</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.09</td>
<td>12</td>
<td>.52</td>
<td>.15</td>
</tr>
<tr>
<td>2.7</td>
<td>Online</td>
<td>3.86</td>
<td>12</td>
<td>.52</td>
<td>.15</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>3.71</td>
<td>12</td>
<td>.53</td>
<td>.15</td>
</tr>
</tbody>
</table>

A graph of the distribution of responses to item 2.7 (Overall Teaching Effectiveness) for online and paper administrations is provided in Figure 3. As can be seen in Figure 3, the percentage of ratings of 3 and 4 is almost identical across the two methods of administration. The percentage of ratings of 1 and 2 is slightly higher for paper administration, while the percentage of ratings of 5 is slightly higher for online administration.
Figure 3  Greensburg Matched Pairs

Means for survey items based on online and paper surveys of seven courses in Fall, 2011 and paper surveys of the same courses in AY 2010-11 are presented in Table 6. No significant differences between means were found.

Table 6  Greensburg

<table>
<thead>
<tr>
<th>Item</th>
<th>Method of Administration</th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Online</td>
<td>4.04</td>
<td>7</td>
<td>.49</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.08</td>
<td>7</td>
<td>.52</td>
<td>.20</td>
</tr>
<tr>
<td></td>
<td>Paper 2010-11 AY</td>
<td>4.20</td>
<td>7</td>
<td>.42</td>
<td>.16</td>
</tr>
<tr>
<td>2.2</td>
<td>Online</td>
<td>3.94</td>
<td>7</td>
<td>.43</td>
<td>.16</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>3.83</td>
<td>7</td>
<td>.62</td>
<td>.23</td>
</tr>
<tr>
<td></td>
<td>Paper 2010-11 AY</td>
<td>4.08</td>
<td>7</td>
<td>.25</td>
<td>.10</td>
</tr>
<tr>
<td>2.3</td>
<td>Online</td>
<td>4.20</td>
<td>7</td>
<td>.43</td>
<td>.16</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.22</td>
<td>7</td>
<td>.29</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>Paper 2010-11 AY</td>
<td>4.34</td>
<td>7</td>
<td>.26</td>
<td>.10</td>
</tr>
<tr>
<td>2.4</td>
<td>Online</td>
<td>4.07</td>
<td>7</td>
<td>.63</td>
<td>.24</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>3.95</td>
<td>7</td>
<td>.76</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>Paper 2010-11 AY</td>
<td>4.15</td>
<td>7</td>
<td>.57</td>
<td>.22</td>
</tr>
<tr>
<td>2.5</td>
<td>Online</td>
<td>4.16</td>
<td>7</td>
<td>.41</td>
<td>.16</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>4.17</td>
<td>7</td>
<td>.46</td>
<td>.17</td>
</tr>
<tr>
<td></td>
<td>Paper 2010-11 AY</td>
<td>4.26</td>
<td>7</td>
<td>.26</td>
<td>.10</td>
</tr>
<tr>
<td>2.7</td>
<td>Online</td>
<td>3.96</td>
<td>7</td>
<td>.43</td>
<td>.16</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>3.82</td>
<td>7</td>
<td>.54</td>
<td>.21</td>
</tr>
<tr>
<td></td>
<td>Paper 2010-11 AY</td>
<td>4.00</td>
<td>7</td>
<td>.43</td>
<td>.16</td>
</tr>
</tbody>
</table>

A graph of the distribution of responses to item 2.7 (Overall Teaching Effectiveness) for online and paper administrations in Fall, 2011 and paper administrations in 2010-11 AY is provided in Figure 4.
Figure 4 Greensburg

As can be seen in Figure 4, there was a greater difference between the distribution of responses for the two paper administrations (Fall, 2011 and AY 2010-11) than there was between the distribution of responses for online and paper administrations in Fall, 2011. More specifically, lower percentages of ratings of 1, 2, and 3, and a noticeably higher percentage of ratings of 4 were observed in AY 2010-11.

Pilot – Open-ended Comments

One of the major differences in results of in-class vs. online surveys is the written comment section. In-class survey participants’ comments are handwritten and cannot be condensed on the results report. Online participants comments are typewritten and condensed on the results report. An analysis of the number of words written in-class vs. online was conducted. Ten percent of matched classes were randomly selected to compare the number of words written during the in-class paper surveys during AY 2010-11 and typed in the fall of 2011 for the same class/instructor, n=5. Two classes were Engineering classes and three were in Arts & Sciences. Table 7 shows the breakdown of number of words for each class.

Table 7 Number of Words for each type of survey for four Open-ended Items

<table>
<thead>
<tr>
<th>Class</th>
<th>Paper</th>
<th>Online</th>
<th>Graduate/Undergrad Course</th>
<th>&lt; or &gt; 100 Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>2384</td>
<td>3164</td>
<td>U</td>
<td>&gt;100</td>
</tr>
<tr>
<td>Class 2</td>
<td>754</td>
<td>552</td>
<td>U</td>
<td>&lt; 100</td>
</tr>
<tr>
<td>Class 3</td>
<td>732</td>
<td>1106</td>
<td>U</td>
<td>&lt; 100</td>
</tr>
<tr>
<td>Class 4</td>
<td>84</td>
<td>655</td>
<td>G</td>
<td>&lt; 100</td>
</tr>
<tr>
<td>Class 5</td>
<td>1209</td>
<td>881</td>
<td>U</td>
<td>&lt; 100</td>
</tr>
<tr>
<td>Total</td>
<td>5163</td>
<td>6358</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The total number of words was higher for online surveys but there was no consistency among classes. Three classes had a higher number of words recorded online but two classes had more words recorded on paper.

**Pilot – Online Pilot Faculty Survey**

In conjunction with CIDDE, a faculty survey was developed to collect feedback about the online process and rate the satisfaction of students’ responses. *(Appendix I)* The survey was delivered to faculty via Class Climate in the same manner the students receive Student Opinion of Teaching Surveys.

The survey was emailed to all 88 pilot participants on January 12, 2012 and they were asked to respond by January 25, 2012. A reminder was sent on January 19, 2012, and a second reminder was sent on January 23, 2011. The response rate for instructors was 73%.

The instructors were initially asked to compare the response rates received from their online surveys with what they receive from paper surveys. Figure 5 shows that the majority of the instructors feel that the online response rates are either somewhat lower or not really different from the response rates obtained when students complete the surveys in-class on paper.

**Figure 5**

![Compare Online and Paper-based Response Rates](image-url)
Figure 6 gives the level of satisfaction of instructors with the online response rate.

**Figure 6**

![Graph showing satisfaction with online response rate]

The response with the highest rating was Very Satisfied with 32% responding. The response with the second highest rating was somewhat dissatisfied with 26%.

Most instructors prefer receiving the open-ended comments in the typed format (57%) and 36% have no preference (Figure 7).

**Figure 7**

![Graph showing preferred format for feedback from open-ended questions]
The majority of instructors indicated that there was not really any difference in the quantity and quality of feedback from the open-ended questions (Figures 8 and 9).

**Figure 8**

Compare Quantity of Feedback from Open-ended Questions

<table>
<thead>
<tr>
<th>Pct. of Responses</th>
<th>Online much less</th>
<th>Online somewhat less</th>
<th>Not really different</th>
<th>Online somewhat more</th>
<th>Online much more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online much less</td>
<td>3.2</td>
<td>12.9</td>
<td>54.8</td>
<td>25.8</td>
<td>3.2</td>
</tr>
</tbody>
</table>

**Figure 9**

Compare Quality of Feedback from Open-ended Questions

<table>
<thead>
<tr>
<th>Pct. of Responses</th>
<th>Online much lower</th>
<th>Online somewhat lower</th>
<th>Not really different</th>
<th>Online somewhat higher</th>
<th>Online much higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online much lower</td>
<td>1.6</td>
<td>11.1</td>
<td>52.4</td>
<td>31.7</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Overall the perception of the instructors toward online surveys was positive with a few voicing the opinion that they prefer the paper in-class surveys. Appendix J lists all of the faculty comments to the questions of what they did to encourage student participation (1.7) and Appendix K lists any additional comments (1.8).

Some replies were outside of the purpose of the Online Pilot while other replies indicated misconceptions and misinformation that OMET will hopefully rectify.
Overall Summary

The finding that average ratings of overall teacher effectiveness were no different for online surveys than for paper surveys was obtained consistently across all of the methods of data analysis described in this report. The Preliminary Study compared all online surveys administered in AY 2010-11 to a random sample of paper surveys during the same time period. The Matched Pairs Oakland Study compared the results of online surveys to the results of paper surveys for the same course taught by the same instructor in a previous semester. The Matched Pairs Greensburg Study compared the results of online and paper surveys, respectively, for two sections of the same course taught by the same instructor in the same semester. Regardless of methodology, no differences in average ratings of overall teacher effectiveness were found.

Average response rate was found to be significantly lower for online surveys than for paper surveys in both the Preliminary Study and the Oakland Matched Pairs Study. The average response rate for paper surveys in the Preliminary Study (76%) was quite similar to the corresponding average in the Matched Pairs Oakland Study (75%). However the average response rate for online surveys in the Preliminary Study (39%) was noticeably lower than the corresponding average in the Matched Pairs Oakland Study (53%). A plausible reason for this difference is that participants in the Oakland Study were provided with suggestions on how to encourage their students to participate in online surveys.

In summary, results of this pilot study provide evidence of no difference in average ratings of overall teaching effectiveness, and evidence for a lower average response rate for online surveys than for paper surveys. However, the smaller disparity observed in the Oakland Matched Pairs Study than in the Preliminary Study suggests that encouraging students to participate can lead to increased response rates for online surveys.
Appendix

Appendix A – Standard Online Confirmation Letter

Appendix B – Letter to Online Pilot Participants only

Appendix C – Email to Online Pilot Participants combining information in Letters Appendix A and B

Appendix D – Survey Forms

Appendix E – Distribution of Responses for Preliminary Study

Appendix F – Distribution of Responses for Matched Pairs Study

Appendix G – Distribution of Responses for Greensburg Matched Fall 2011 Study

Appendix H – Distribution of Responses for Greensburg Matched Fall 2011 Online and Paper Surveys and AY 2010-11 Paper Survey Study

Appendix I – Online Pilot Faculty Survey

Appendix J – Faculty Comments Regarding Encouraging Students to Participate

Appendix K – Additional Comments from Faculty Survey
Appendix

Appendix A – Standard Online Confirmation Letter

Appendix B – Letter to Online Pilot Participants only

Appendix C – Email to Online Pilot Participants combining information in Letters Appendix A and B

Appendix D – Survey Forms

Appendix E – Distribution of Responses for Preliminary Study

Appendix F – Distribution of Responses for Matched Pairs Study

Appendix G – Distribution of Responses for Greensburg Matched Fall 2011 Study

Appendix H – Distribution of Responses for Greensburg Matched Fall 2011 Online and Paper Surveys and AY 2010-11 Paper Survey Study

Appendix I – Online Pilot Faculty Survey

Appendix J – Faculty Comments Regarding Encouraging Students to Participate

Appendix K – Additional Comments from Faculty Survey
Confirmation of Online Survey
Fall 2011

This is a confirmation for the above information only. You will also receive a notification with a link to Class Climate where you may add Instructor Optional Questions to your survey.

Please inform the office of any INCREASE in the number of students.

Emails to students with a link to participate in an online survey will be sent out the week of November 14th. Weekly reminders will be sent to students who have not responded. The deadline to respond to the survey is December 9th, 2011.

It is important for the students to feel that you are truly interested in their judgments so that they will take the survey seriously and provide useful feedback to you. We suggest that you make a statement to your class at the start of the survey period that expresses something like the following:

You will be receiving an email to your Pitt email address asking you to participate in an online student opinion of teaching survey for this class. Take a few minutes beforehand and think about this course – about what you are learning and how you are learning it. In addition to asking you for numerical ratings, there will be questions asking for your comments on me and on the course in general. Please reserve enough time to make thoughtful and constructive responses. (Once the link is enabled, students should allow enough time to complete the survey. The link cannot be reopened.) Think about what aspects of my teaching and the course were beneficial to you and what aspects you feel could be improved. Please give your serious consideration to this process, which will provide me with information for planning this course in the future. This is your opportunity to have an influence on teaching and learning at the University of Pittsburgh. I will not receive the results until after your final grades are posted and they are completely anonymous. I would like feedback from ALL members of the class, so please give your independent opinions and suggestions. I sincerely appreciate your taking the time to do this.

Thank you.
November 1, 2011

Dear Professor,

Thank you for your willingness to participate in the Student Opinion of Teaching Online Survey Pilot. Your students will receive an email with a direct link for them to access the survey. The online survey contains the same questions as an in class paper survey. You will receive results the same time as all other faculty in your school or department.

Attached is an online survey Confirmation Letter. Please verify that all the class information is correct. This will also give you information about adding Instructor Optional Questions to your survey if you wish. Dates that emails will be sent to students are included along with a suggested announcement to alert them to look for the email and encourage them to participate. There are some very useful suggestions in the letter that you can use to encourage your students to complete their survey. Please take time to speak to your students about the survey and why you would like them to participate. Research has shown that students who are made aware of the importance of their participation are more likely to respond.

Data such as overall response rate, overall average ratings, and distribution of responses will be used for Pilot Study purposes. No specific instructor data will be used for the study.

If you have any questions, please do not hesitate to contact the OMET office.

Again, thank you for your participation.

Sincerely,

Nancy Reilly
Director, Office of Measurement and Evaluation of Teaching
Dear Professor,

Thank you for your willingness to participate in the Student Opinion of Teaching Online Survey Pilot. On November 14th your students will receive an email with a direct link to access the survey. Weekly reminders will be sent to students who have not responded. The deadline to respond to the survey is December 9, 2011. The online survey contains the same questions as an in-class paper survey. You will receive results at the same time as all other faculty in your school or department. Data such as overall response rate, overall average ratings, and distribution of responses will be used for Pilot Study purposes. Data will only be reported in aggregate form.

You will also receive a notification email with a link to Class Climate where you may find Instructor Optional Questions to your survey.

Please check your campus mail for your Confirmation Letter with specific class information. If you have an INCREASE in the number of students, please go to omet.pitt.edu and complete the Survey Change Form.

Please take time to speak to your students about the survey and why you would like them to participate. Research has shown that students who are made aware of the importance of their participation are more likely to respond. It is important for the students to feel that you are truly interested in their judgments so that they will take survey seriously and provide useful feedback to you. We suggest that you make a statement to your class at the start of the survey period that expresses something li
the following:

You will be receiving an email to your Pitt email address asking you to participate in an on-line student opinion of teaching survey for this class. Take a few minutes beforehand and think about this course – about what you are learning and how you are learning it. In addition to asking you for numerical ratings, there will be questions asking for your comments on me and the course in general. Please reserve enough time to make thoughtful and constructive responses. (Once the link is enabled, students should allow enough time to complete the survey. The link cannot be reopened.) Think about what aspects of my teaching and the course were beneficial to you and what aspects you feel could be improved. Please give your serious consideration to this process, which will provide me with information for planning the course in the future. This is your opportunity to have an influence on teaching and learning at the University of Pittsburgh. I will not receive the results until after your final grades are posted and they are completely anonymous. I would like feedback from all members of the class; please give your independent opinions and suggestions. I sincerely appreciate your taking time to do this. Thank you.

If you have any questions, please do not hesitate to contact the OMET office.
omet.pitt.edu

Again, thank you for your participation.

Sincerely,

Nancy Reilly, Director
Office of Measurement and Evaluation of Teaching

If you are having trouble viewing this e-mail, please click here to view the letter in a web browser.
OMET - Student Opinion of Teaching Questionnaire

Mark as shown: [ ] [ ] [ ] [ ] Following the examples shown, please mark your responses with ONLY an X using a pencil or blue or black ink.
Correction: [ ] [ ] [ ] [ ]

DIRECTIONS: Your instructor has requested a survey of teaching in this class. Please give it your serious attention. After final grades have been submitted, a report summarizing your responses will be sent to the instructor along with a photo-image of your written comments. Thank you.

1. SELF RATINGS

DIRECTIONS: Mark the category which best describes your judgment compared to most courses you have taken.

1.1 Compared to other courses at the same level, the amount of work I did was:
   [ ] Much more
   [ ] Somewhat more
   [ ] About the same
   [ ] Somewhat less
   [ ] Much less

1.2 In this course I have learned:
   [ ] A
   [ ] B
   [ ] C
   [ ] D
   [ ] Other

1.3 The grade I expect in this course is:
   [ ] A
   [ ] B
   [ ] C
   [ ] D
   [ ] Other

2. TEACHING EVALUATION

DIRECTIONS: Please indicate your response to items 2.1 - 2.9 by choosing one category. Judge each item separately.

2.1 The instructor presented the course in an organized manner:
   [ ] To a very high degree
   [ ] To a moderate degree
   [ ] To a small degree
   [ ] Hardly at all

2.2 The instructor stimulated my thinking:

2.3 The instructor evaluated my work fairly:

2.4 The instructor made good use of examples to clarify concepts:

2.5 The instructor maintained a good learning environment:

2.6 The instructor was accessible to students. (Do not answer if no basis to judge) [ ] Ineffective
[ ] Only fair
[ ] Competent
[ ] Very good
[ ] Excellent

2.7 Express your judgment of the instructor’s overall teaching effectiveness:

2.8 Would you recommend this course to other students?
   [ ] Definitely not
   [ ] Probably not
   [ ] Probably yes

2.9 Would you recommend this instructor to other students?
   [ ] Definitely not
   [ ] Probably not
   [ ] Definitely yes
3. TEACHING COMMENTS

3.1 What were the instructor's major strengths?

3.2 What were the instructor's major weaknesses?

4. COURSE COMMENTS

4.1 What aspects of this course were most beneficial to you?

4.2 What suggestions do you have to improve the course?
OMET - Student Opinion of Teaching Questionnaire

Mark as shown: ☐ ☒ ☐ ☐ Following the examples shown, please mark your responses with ONLY an X using a pencil or blue or black ink.
Correction: ☐ ☐ ☐ ☒

DIRECTIONS: Your instructor has requested a survey of teaching in this class. Please give it your serious attention. After final grades have been submitted, a report summarizing your responses will be sent to the instructor along with a photo-image of your written comments. Thank you.

1. SELF RATINGS

DIRECTIONS: Mark the category which best describes your judgment compared to most courses you have taken.

1.1 Compared to other courses at the same level, the amount of work I did was:
☐ About the same
☐ Somewhat more
☐ Much more
☐ Somewhat less
☐ Much less

1.2 In this course I have learned:

1.3 The grade I expect in this course is:
☐ A
☐ B
☐ C
☐ D
☐ F
☐ Other

2. TEACHING EVALUATION

DIRECTIONS: Please indicate your response to items 2.1 - 2.9 by choosing one category. Judge each item separately.

2.1 The instructor presented the course in an organized manner.
2.2 The instructor stimulated my thinking.
2.3 The instructor evaluated my work fairly.
2.4 The instructor made good use of examples to clarify concepts.
2.5 The instructor maintained a good learning environment.
2.6 The instructor was accessible to students. (Do not answer if no basis to judge)

2.7 Express your judgment of the instructor's overall teaching effectiveness:
☐ Excellent
☐ Very good
☐ Competent
☐ Only fair
☐ Ineffective

2.8 Would you recommend this course to other students?
☐ Definitely not
☐ Probably not
☐ Probably yes

2.9 Would you recommend this instructor to other students?
☐ Definitely not
☐ Probably not
☐ Probably yes
4. TEACHING COMMENTS

4.1 What were the instructor's major strengths?

4.2 What were the instructor's major weaknesses?

5. COURSE COMMENTS

5.1 What aspects of this course were most beneficial to you?

5.2 What suggestions do you have to improve the course?
OMET - Student Opinion of Teaching Questionnaire

**1. SELF RATINGS**

**DIRECTIONS:** Mark the category which best describes your judgment compared to most courses you have taken.

<table>
<thead>
<tr>
<th>Category</th>
<th>About the same</th>
<th>Somewhat less</th>
<th>Much less</th>
<th>Somewhat more</th>
<th>Much more</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Amount that you contributed to your learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 Amount that you learned.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Amount of increased interest in the subject.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2. TEACHING EVALUATION**

**DIRECTIONS:** Please indicate your response to items 2.1 - 2.12 by choosing one category. Judge each item separately.

2.1 The instructor presented the course in an organized manner.  
2.2 The instructor was well-prepared for class.  
2.3 The instructor managed class activities effectively.  
2.4 The instructor interpreted difficult concepts clearly.  
2.5 The instructor showed enthusiasm in teaching the class.  
2.6 The instructor facilitated the development of problem-solving skills.  
2.7 The instructor maintained an environment where students felt comfortable asking questions.  
2.8 The instructor showed respect for the questions and perspectives of students.  
2.9 The instructor gave students sufficient guidance for assigned work.  
2.10 The instructor evaluated my work fairly.  
2.11 The instructor provided helpful feedback.  
2.12 The instructor was available for assistance when needed. (Answer only if you sought assistance.)

Please continue to next side...
2. TEACHING EVALUATION  [Continue]

2.13 Express your judgment of the instructor's overall teaching effectiveness:

Well above average □ Competent □ Excellent □
Ineffective □ Only fair □

3. COURSE EVALUATION

**DIRECTIONS:** Please indicate your response to items 3.1 - 3.3 by choosing one category. Judge each item separately.

3.1 Course was well organized.
3.2 Course objectives and requirements were presented.
3.3 Course covered stated objectives.

**DIRECTIONS:** Rate each of the following (3.4 - 3.8) according to how much it contributed to your learning in this course.

3.4 Written assignments
3.5 Readings
3.6 Handouts
3.7 Small group discussions
3.8 Laboratory

**DIRECTIONS:** For items 3.9 & 3.10, use the categories indicated. Judge each item separately.

3.9 Would you recommend this course to other students? □ Definitely not □ Probably not □ Probably yes

3.10 Would you recommend this instructor to other students? □ Definitely not □ Probably not □ Probably yes

Please continue to next page...
4. TEACHING COMMENTS

4.1 What were the instructor's major strengths?

4.2 What were the instructor's major weaknesses?

5. COURSE COMMENTS

5.1 What aspects of this course were most beneficial to you?

5.2 What suggestions do you have to improve the course?
OMET - Student Opinion of Teaching Questionnaire

Mark as shown: ☐ ☒ ☐ ☐ ☐ Following the examples shown, please mark your responses with ONLY an X using a pencil or blue or black ink.
Correction: ☐ ☐ ☐ ☒ ☐

DIRECTIONS: Your instructor has requested a survey of teaching in this class. Please give it your serious attention. After final grades have been submitted, a report summarizing your responses will be sent to the instructor along with a photo-image of your written comments. Thank you.

1. SELF RATINGS

DIRECTIONS: Mark your responses to the following items. Please mark only one answer for each item.

1.1 Is this course required for you? ☐ No ☐ Yes

1.2 In which program are you enrolled?

☐ Public & Nonprofit Management
☐ Policy Research & Analysis
☐ Urban & Regional Affairs

☐ Global Political Economy
☐ Security & Intelligence Studies
☐ NGO & Civil Society

☐ Planning & Sustainability
☐ MPPM
☐ PhD

Compared to most course that you have taken:

1.3 How much work did you do for this course?

1.4 How difficult did you find this course?

1.5 How much did you learn in this course?

2. TEACHING EVALUATION

To a very high degree
To a considerable degree
To a moderate degree
Hardly at all

2.1 The instructor explained subject matter in a way that made it understandable.

2.2 The instructor presented course content in an organized way.

2.3 The instructor provided useful feedback on work submitted or presented. Do not answer if no basis to judge.

2.4 The instructor stimulated student interest in this subject.

2.5 The instructor maintained an environment where students felt comfortable asking questions.

Please continue to next side...
2. TEACHING EVALUATION  [Continue]

2.6 Express your judgment of the instructor's overall teaching effectiveness:

3. COURSE EVALUATION

DIRECTIONS: Please indicate your response to items 3.1 & 3.2 by choosing one category per question. Judge each item separately.

3.1 Course objectives were presented and discussed.

3.2 Course was consistent with the stated objectives.

DIRECTIONS: Rate each of the following (3.3 - 3.12) according to how much it contributed to your learning in this course.

3.3 Lectures

3.4 Discussions

3.5 Readings

3.6 Homework Assignments

3.7 Exams

3.8 Projects

3.9 Written Papers

3.10 Handouts

3.11 Classroom Activities

3.12 Student Presentations

Please continue to page 3...
3. COURSE EVALUATION [Continue]

DIRECTIONS: For items 3.13 & 3.14, use the categories indicated. Judge each item separately.

3.13 Would you recommend this course to other students?
☐ Definitely not  ☐ Probably not  ☐ Probably yes
☐ Definitely yes

3.14 Would you recommend this instructor to other students?
☐ Definitely not  ☐ Probably not  ☐ Probably yes
☐ Definitely yes

4. TEACHING COMMENTS

4.1 What were the instructor's major strengths?

☐

4.2 What were the instructor's major weaknesses?

☐

5. COURSE COMMENTS

5.1 What aspects of this course were most beneficial to you?

☐

5.2 What suggestions do you have to improve the course?

☐
APPENDIX E

Distribution of Responses
2010-11 AY Preliminary Study
Item 2.1 Presented Course in Organized Manner

Distribution of Responses
2010-11 AY Preliminary Study
Item 2.2 Stimulated My Thinking
Distribution of Responses
2010-11 AY Preliminary Study
Item 2.3 Evaluated My Work Fairly

<table>
<thead>
<tr>
<th>Pct of Responses</th>
<th>Online</th>
<th>Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardly at all</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>To sm degree</td>
<td>3.7</td>
<td>4.0</td>
</tr>
<tr>
<td>To mod degree</td>
<td>13.3</td>
<td>14.2</td>
</tr>
<tr>
<td>To consid degree</td>
<td>31.9</td>
<td>34.9</td>
</tr>
<tr>
<td>To v high degree</td>
<td>49.9</td>
<td>45.8</td>
</tr>
</tbody>
</table>

Distribution of Responses
2010-11 AY Preliminary Study
Item 2.4 Made Good Use of Examples

<table>
<thead>
<tr>
<th>Pct of Responses</th>
<th>Online</th>
<th>Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardly at all</td>
<td>1.8</td>
<td>1.4</td>
</tr>
<tr>
<td>To sm degree</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>To mod degree</td>
<td>16.3</td>
<td>16.8</td>
</tr>
<tr>
<td>To consid degree</td>
<td>29.2</td>
<td>32.0</td>
</tr>
<tr>
<td>To v high degree</td>
<td>47.0</td>
<td>44.1</td>
</tr>
</tbody>
</table>
### Distribution of Responses
#### 2010-11 AY Preliminary Study

**Item 2.5 Maintained Good Learning Environment**

- Hardly at all: 1.8 (Online), 1.0 (Paper)
- To some degree: 4.0 (Online), 3.3 (Paper)
- To moderate degree: 13.0 (Online), 13.4 (Paper)
- To considerable degree: 29.3 (Online), 30.3 (Paper)
- To very high degree: 51.8 (Online), 52.1 (Paper)

### Distribution of Responses
#### 2010-11 AY Preliminary Study

**Item 2.7 Overall Teaching Effectiveness**

- Ineffective: 2.4 (Online), 1.9 (Paper)
- Fair: 4.4 (Online), 4.8 (Paper)
- Competent: 16.0 (Online), 18.2 (Paper)
- Very good: 39.7 (Online), 39.6 (Paper)
- Excellent: 37.5 (Online), 35.5 (Paper)
Distribution of Responses
Greensburg Matched Fall 2011
Item 2.1 Presented Course in Organized Manner

Distribution of Responses
Greensburg Matched Fall 2011
Item 2.2 Stimulated My Thinking
APPENDIX I

Online Pilot Faculty Survey

1. Compare the response rates received from your online evaluations and your paper-based evaluations.
The rate of return for the online responses was _________ than the paper-based responses.
   a. much lower
   b. somewhat lower
   c. not really different
   d. somewhat higher
   e. much higher

2. How satisfied are you in the return rate of the online evaluations?
   a. very dissatisfied
   b. somewhat dissatisfied
   c. neither satisfied nor dissatisfied
   d. somewhat satisfied
   e. very satisfied

3. Refer to the feedback you received from the open-ended questions. Compare the typed online feedback with the handwritten paper feedback. Do you prefer feedback that is:
   a. handwritten
   b. typed
   c. no preference

4. Look at the responses provided to the open-ended questions from the surveys. Comparing the online and paper-based responses, the amount (quantity) of feedback received for the online responses was _________ than the paper-based responses.
   a. much less
   b. somewhat less
   c. not really different
   d. somewhat more
   e. much more

5. Compare the online and paper-based open-ended responses. The substance (quality) of feedback received for the online responses was _________ than the paper-based responses.
   a. much lower
   b. somewhat lower
   c. not really different
   d. somewhat higher
   e. much higher
6. Did you encourage your students to complete the online surveys?
   a. No
   b. Yes
   If “yes” what did you do?

7. Please give any other comments, you would like to make.
If yes, what did you do?

- Announce in class as instructed by OMET. One reminder near end of term.
- Announced it several times to the class.
- Announced that the survey was available, asked them to please fill it out, and explained that I pay close attention especially to the open-ended responses.
- Asked the students during the class if they completed and mentioned the importance of the surveys.
- Briefly announced the survey in lecture.
- Discussed the importance of the process in class.
- Discussed the process in class and noted that their feedback was important to improvement of the course.
- Emailed students the week before.
- Encourage them by saying it would make my teaching better for the next round of students.
- I announced it in class and asked them to please attend to it.
- I explained to them the importance of the completion of surveys across their courses, whether in paper or electronic form (and explained why).
- I mentioned it in class and in emails at least three or four times.
- I mentioned that it is important for them to give me critical feedback to improve areas of weakness in my teaching.
- I mentioned the survey 3 or 4 times in lecture.
- I mentioned them in class.
- I requested in class a couple of times that they complete the online surveys. I told them that I pay attention to the surveys and they offer important feedback to me, as a teacher, and for the course.
- I sent a note following the first notification from OMET. I mentioned it once each week in class in both classes. I said that their opinions and reviews were important and can help improve the class in the future and for me to learn what works and what needs improvement.
- I sent two or more emails to the entire class; I mentioned the surveys on several occasions and asked how many students already completed the surveys, etc. I did not do this every class, but I mentioned and urged them to complete the online surveys a few times.
- I told them to respond the email they will get.
- I verified that had received notification of the online survey and explain to them it role and importance in improving the student experience.
- Just mentioned that the survey was online and not in class.
- Made an announcement in class indicating that I take them seriously and read all student comments.
- Made announcement in class once, posted announcement on courseweb once, and emailed all students in the class once (at different times, spacing the reminders out).
- Mentioned I would appreciate it if they took the time to complete the online course evaluation survey.
- Mentioned completing the surveys at least twice in class, asking for helpful feedback for future courses.
- Mentioned in class that OMET surveys are taken seriously by university administrators so a student's opinion may carry weight in personnel proceedings and is worth taking the trouble to record.
- Mentioned in class. It was a mess because it was sent out in November instead of at the end of the course. No reason for it. Students answered right away before they had a chance to finish the last third of the course. the course is cumulative, so missing the last third is a big deal.
- Mentioned it in class at least once a week.
- Mentioned it in class twice... emphasizing the importance of their feedback and that I would appreciate it if they completed the survey.
- Mentioned several times in class.
- Mentioned the survey in class two times.
- Mentioned them in class.
- Multiple announcements in class.
On at least three occasions, I announced to the class that we were participating in the pilot effort to conduct OMET online. I always stress the importance of the class climate surveys.

- Posted numerous announcements; sent several email reminders; mentioned it in the workshops.
- Reminded them in class several times and via email once.
- Right after my students should have gotten the evaluation emails, I asked if they had received them, and asked them to complete the evaluations. I told them that the responses were very important, both to determine how I would organize subsequent syllabi and to tell me what I should work on in my own teaching. I also told them that even if they didn’t have much to say, they should fill out the survey anyway, because for my own future it is important that I have a significant percentage of the class respond to the surveys, otherwise the results don’t mean as much to potential employers. Unfortunately, I still only got 50-65% completion.
- Told them in class that OMET evaluations were an important way of providing feedback to the instructor
- Told them in class to look for it and reply.
- Two in class reminders.
- Two verbal reminders during class time.
- Announced it repeatedly, called it a personal favor, explained that it affected my promotion and tenure.
- One in class reminder.
- Reminder in class.
- Told them to expect it and asked that they participate.
- Two emails to announce and remind them.
- Used talking points sent to me from OMET, asked them several different time to complete it, asked them how they felt about electronic versus paper & discussed their objections in class.
- I mentioned it in class 2 times, and said they were part of an important pilot project.
- I reminded them in class.
- I stated that they were participating in a pilot project to complete their evaluations online, and that I would appreciate their participation... and honest assessment.
Please give any other comments, you would like to make.

- A few students indicated that they liked the online process.
- All students replied to online survey. I am very satisfied with the online procedure.
- Am very happy with the online format. Was not aware of the slight drop in responses, will probably make more of an effort to urge students to complete online survey. Would not really want to go back to the old paper version.
- Great system!
- I appreciated the ease of the survey and the format seemed to encourage students to be more thoughtful and constructive.
  Thank you!
- I consider the online survey much preferable to the old-fashioned paper-and-pencil one, as it is much less disruptive to the course. I was very pleased with how well it seems to have worked for my two classes during the past semester. PLEASE do continue this pilot and make it the default mode for class evaluation as soon as possible!
- I definitely think that the online surveys are the way to go.
- I didn’t get any written comments to open-ended questions. I just got the statistical analysis. Was something not sent to me?
- I feel the online survey results are comparable to in class. I do not think there was any significant differences in the way the questions were answered. Consequently, I am strongly in favor of completing online course surveys from now on. It doesn’t take up valuable class time, responses are appropriate, and it is all electronic.
- I felt my students enjoyed the online format. Also, I hope that these results are shared with my department.
- I hate to see the poor work-study students lose the income and experience but feel this is a better way to handle this function and endorse its use.
- I have a slight preference for the in-class method, but the online version was quite satisfactory.
- I liked the online survey! I think students are less likely to do them because they are outside of class BUT this isn’t a bad thing. The students who fill them out tend to be the ones who really liked the class and want to take time out to say so or really didn’t enjoy the class and want to use the space to vent. Either way, the people who didn’t respond are likely the ones who would have given neutral feedback on the paper surveys anyhow.
  Thanks for having me as part of the pilot!
- I prefer online survey administration above paper based surveys.
- I prefer the online surveys and arguably the feedback I got was of a higher quality than when students have just a few minutes to complete the evaluation in a classroom. On the other hand, higher participation would obviously be better. At my last institution, students could not see their grades unless they responded to the evaluation. They didn’t have to complete it, but they at least had to consciously waive the opportunity to complete it. I wonder if a system like that could help here.
- I think my only concern is the lower response rate, however it was still a good sample size.
- I think students feel more comfortable with typed responses, knowing I won’t recognize their handwriting if they want to express something critical about me or the course. I value their input and hope this online method takes flight.
- I very much like the fact that this did not take up class time.
- I was surprised and pleased by the rate of response. Whereas only 63% were in class for a paper survey, 78% responded to the online survey.

- I was very hopeful that the online version would allow a similar completion rate without taking up instructional time, and that it would lead to more useful feedback. This was not the case – completion was lower, and more polarized (either very enthusiastic students or student who really was not pleased).
  The reforms we really need re OMETS include:
  a. less frequent administration (a sampling for each instructor rather than every section for every class. Students and instructors end up with evaluation fatigue and the data becomes useless, suggesting the utility of a rotation akin to our rotation through course assessments) and
  b. discarding of outliers in an individual course sample (for example, a student who gives all 1’s ) and
  c. a comparison between evaluations and achievement in the course.
- I worry that the online feedback reaches more of the students who are dissatisfied with the course and thus are less likely to be physically present when a face-to-face survey is done. (Also, research has shown that people are more likely to say inappropriate things online, things they might never say face-to-face.) I think a standardization study should be done to see how the online and the face-to-face survey results compare with one another. Faculty who use the online surveys should not be penalize, if indeed such surveys produce more negative responses.
- It is much nicer to have this done on-line rather than having someone come into your class and interrupt...
- It seems to me that there was more carping than usual about perceived harshness of grading. Though my numerical evaluation was similar to other semesters, I was really disappointed by the low response rate, as I was emphatic on repeated occasions that this was an important process.
- It was easy and convenient. I’m happy that OMETS let me in at the 11th hour.
- It was useful to not interrupt class time with an in-class survey. I would be perfectly satisfied with the online version if a larger percentage of students participated.
It would be nice if we had some way of determining who had completed surveys and who had not. That way, we could make it an assignment - one that would simply be "complete" or "incomplete," but an assignment nonetheless. Or even extra credit. Or, at least we could get a running completion rate - that way we could remind the class to finish the evaluations.

I was actually very surprised at the quality of responses - I had heard from another professor that she had received very well-considered and thorough responses, even though she did not have a very high completion rate. My responses were basically indistinguishable from in-class evaluations, which made the low completion rate not worth it.

Main problem seemed to be huge difference in response rate from the in class evaluation.

Next semester I will try encouraging the students to do the surveys to see if it makes an impact on the number of people taking the survey. However, I also feel it might be a good thing that some people do not complete the survey. There are a lot of kids that do not care as they fill out the paper survey and the only reason they are doing it is because you have them in the classroom. Thus, their feedback is not very valuable. However, if someone takes the time to complete the survey they typically have something valuable to say.

The other good thing is you save half a class period by not having it done in the classroom.

One should be able to control the timeframe during which students can respond.

Only about 60% of my class responded and they were much more negative than my usual evaluations. It seems to me that the students who were really not doing that well responded and only some of the better students did. In principle, I think it makes sense to do this online, but I was upset by the negative tone of some of the comments I received.

Overall, I was very pleased with the actual responses of the students; I was somewhat disappointed that only 72% responded; I MUCH prefer the online surveys to paper-based surveys, because scheduling these is always a pain, and of course takes away precious class time. I also prefer the anonymity of the text responses to the handwritten responses - they are easier to read and also seem to free the students to be more honest.

I wonder if there is some kind of incentive to induce a higher percentage of responses, but off the top of my head I have no idea what that could be.

I have to be honest with you - I didn't even look at the survey results until THIS survey forced me to! I'm glad I did. It would probably be a good idea to maintain these follow-up surveys of instructors to induce them to analyze their survey results, even if YOU don't read THESE responses!

Please asap set up online surveys for ALL courses; students dislike writing them in class, and it wastes teaching time.

The online survey should be an option, especially in large classes, where lectures meet only twice a week for 50 minutes. In such classes, losing twenty minutes of lecture time can be costly in terms of material covered in the course.

The online version favors students who feel strongly. I think it tends to favor students who have strong negative opinions. I can't tell precisely, but several students who I reminded were one of the few who clearly enjoyed the course, but told me they kept delaying their response. The students told me that they could not tell if their responses were received.

I would not want to use online surveys again.

The students did not like the idea of switching to online evens 'cuz they prefer to do the evans during class time rather than on their own time.

The typed comments are MUCH easier to read and create a more compact OMET, easier for evaluation. I'd sign up for online evans in a heartbeat.

There was no reason why I shouldn't be able to request an appropriate release date. All this tech and they are released at the same time? Or did I do something wrong when I filled out the form?

This is the last time I will use online OMET. I have taught this course for several years and have always received strong evaluations as well as very useful written comments. This year the course had its highest attendance ever which would suggest that students had heard good things about it (this is an optional second year graduate course). I spent quite some time developing new handouts for areas which I knew to be important for PhD students (integration, unit root, filtering,...). Yet, my online OMET evaluations were significantly lower than in the past with much fewer (though all positive) comments than I used to get. I do not understand what might have happened. Is it the longer time period students had to fill the evaluation? (I seem to remember that the limit date was 12/14 - I gave them a take home exam on the 12th, so they got the exam but hadn't returned it yet by 12/14 - amazingly, they did very well on a difficult exam and got overall my best grades ever - so they clearly learned a lot even though they don't seem to recognize it). I am completely baffled but will not used again online OMET. I very much prefer having the students using 20 minutes of class time to fill the written OMET forms. They appear to do a much better and informative job this way and they have no occasions for discussing together their evaluation so that I will get truly individual opinions. At minimum I believe that the time students are given to fill the online evaluation is far too long and, foremost, should not extend so close to the end of term. This is all I have to say. I am glad non-tenured faculty were not offered online OMET evaluations. As chair I would have a serious problem using results which, based on my limited experience, are not consistent with results from written OMET evaluations. As never again I Jean-Francois Richard

Though it is more cumbersome, my sense is that a captive audience is bound to give a higher rate of return...in terms of quality of response I see no difference, really.

While there were fewer responses to the online survey, I think that it is significantly more useful than the paper version. The comments were more useful to me from the online survey and I believe this is because the students that responded did so because they "chose" to - and chose to complete it in their own time. I felt that the paper based surveys were often filled in by students "because we had to" so they seemed to feel that putting an answer was more important than putting a constructive or useful answer. I would wholeheartedly support online evaluations as the way forward and hope to continue using them for any future classes I teach.

Will request only paper surveys in class from now on. I had 72 students enrolled in the class and only 35 completed the online survey.

I was all for doing this. I taught a large class with close to 60 students and only received 37 responses. My OTE was 4.7 so I can't complain, but likely it was lower as people who weren't happy likely did not complete the survey.

Perhaps I will remind/encourage them to complete this next time, and that will increase participation rates.
I had no opportunity to choose additional questions, which I did for the paper survey. When I received the email announcing the release of the online survey, I responded asking about the opportunity to add additional questions. I was told I had already added them (when I hadn't). Apparently, it pulled the questions I had added for one class and also used them for the other, except it didn't use all of them. I had 7 questions about projects on the paper survey and only 3 appeared in the online survey, and they weren't the first three in the list. It did have all the other questions I had chosen for the paper survey.

The only reason I prefer typed responses is that I feel more sure that those are complete. The handwritten responses are often cut off so only partial words or lines are included and I am often left wondering if I have a complete picture of what students wrote. Human error seems more of an issue here than in the online system which I presume pulls everything automatically.

I had two classes on line and two classes in person. The on line comments were much less, except for one student who felt "permission" to write extensively. I do not know if he would have done this on a handwritten page -- and I know he would not have been able to copy & paste his opinion in two different sections.

In one class, the number of students participating on-line was far less than the number participating in class. This makes the ratings much less reliable.

I like the online much better for several reasons:

1. The rates of response were the same as paper (no downside here)
2. No class time was taken for the survey
3. The results are much easier to read and digest because I don't have to decipher handwriting.

The on-line feedback had 35 out of 42 respondents for the first question (The instructor's major strengths), and the in-class feedback had 48 out of all 48 who took the survey. However, the on-line feedback had slightly longer answers and more complete sentences. One student wrote 4 sentences, which I don't think I have ever seen before. Most of the comments were similar in length and style, though, in both formats.
Appendix C

Effects of the Transition from Paper In-Class Student Evaluations of Teaching to Online Out-of-Class Student Evaluations of Teaching, January 28, 2012
Effects of the transition from paper in-class student evaluations of teaching to online out-of-class student evaluations of teaching

Christian D. Schunn
Professor of Psychology
Senior Scientist, LRDC

Teaching evaluation data was collected from 43 particular courses in Arts & Sciences (n=25) and Engineering (n=18) that were taught by the same individual across two consecutive years. Only tenure faculty or non-tenure track lecturer/instructors participated. The classes include large classes (>100 students, n=5) and small classes (n=38) as well as lectures (n=33) and seminars (n=11) (only one class was a laboratory).

Student evaluations of teaching were collected in a previous year according to the traditional manner: in-class and on paper. In the current year, evaluations were collected using an online survey and students completed them at their leisure out of class. The survey system sent out weekly reminders to students that had not completed the survey. Instructors were also asked to remind students to complete the online survey.

The exact same rating rubrics were used, consisting of 1–5 Likert ratings on the following 7 questions:

1. The instructor presented the course in an organized manner.
2. The instructor stimulated my thinking.
3. The instructor evaluated my work fairly.
4. The instructor made good use of examples to clarify concepts.
5. The instructor maintained a good learning environment.
6. The instructor was accessible to students.
7. Express your judgment of the instructor’s overall teaching effectiveness.

These ratings are all strongly correlated with one another (Pearson correlations of .5 to .6). A factor analysis conducted on these seven questions found one overall factor and the last question (overall teaching effectiveness) was the most central item in this factor. In annual evaluations and in promotion and tenure situations, this last item tends to be most influential. Therefore, the effects of the evaluation change were examined only on this last item.

Did the student response rate change?

The literature suggests that responses rates are lower in online than paper form, although with varying results depending upon context and incentives for completing the survey. In our study, there was a large overall drop in response ratings, going from a mean of 76% to 53% (Cohen’s d=1.6, p<.000000001). However, this drop in response rate was not uniform by class type. Figure 1 presents the drop in response rate by Unit, class size, and
student level. Arts&Sciences and Engineering classes saw similar drops, as did graduate vs. undergraduate classes. However, large classes (100 students or more) saw less of a drop than did medium (30 to 99 students) or small classes (Cohen's d=1.3, p<.03 for large vs. medium). Overall, every category saw a statistically reliable drop except graduate classes (lower N) and large classes.

**Figure 1.** Mean change (with standard error bars) in response rate from paper to online as a function of unit, class size, and student level.

To better understand the effect of class size on change in response rates across format, it is important to understand the initial effect of class size on response rates in paper in-class administrations. Figure 2 presents this relationship. Basically, in the paper in-class context, response rates are lower in big classes, going from near 90% response rates in very small classes to below 50% response rates in very large classes. This relationship is likely driven by attendance rates—students cannot take an in-class paper survey if they are not in-class, and large classes tend to have lower attendance rates.

However, for online, out-of-class surveys, there is almost no relationship between class size and response rates: about 55% of students respond regardless of class size. (The increased dispersion in responses rates for smaller class sizes simply reflects higher sampling error for low N situations).

**So, we can explain the differential impact of the switch to online by class size as follows: as class size increases, attendance drops, and in-class survey rates then eventually drop to the same general level of online survey completion rates.**
Did the mean evaluation ratings change?

When there are differential response rates by method, there is a concern about systematic changes in who is participating (e.g., primarily the most engaged students, the students with free time, or the students who are angry) which could influence the mean ratings that are used to evaluate teaching. However, a change in response rate does not necessarily produce a change in rating means if dropout is random or if there is a range of different factors that cancel each other out (e.g., the happiest and angriest students both are more likely to participate in online formats).

**Overall, there was no effect at all of format on teaching rating means, with a mean of exactly 4.03 (1–5 scale of overall teaching effectiveness) for online and paper formats.**

This same basic null effect on mean ratings held across unit, class size, and student level (see Figure 3). That is, the overall means were almost exactly the same for paper and online cases throughout. There was one small trend in which A&S classes showed more negative changes in the means relative to Engineering classes (Cohen’s d=.7, p<.04). However, the A&S overall drop was not statistically different from zero nor was the Engineering gain statistically different from zero. Given the differences were about a tenth of a point on a 5-point scale and just on the edge of statistically different from one another, this trend is not worth much attention.
Figure 3. Mean change (with standard error bars) in overall mean teaching effectiveness ratings from paper to online as a function of unit, class size, and student level.

The mean shift in ratings is not actually the most important perspective. The absolute mean level on a Likert rating is not all that meaningful (what does a 4 really mean?), but rather we are more interested in the relative ratings across instructors (e.g., how does this instructor compare to other instructors). With this perspective in mind, another way to look at the data is the correlation in rating from paper to online. **This correlation is relatively high (r=.6, see Figure 4): instructors receiving high ratings tend to be receive higher ratings in either format and instructors receiving low ratings tend to receive low ratings in either format.**

Figure 4. Consistency of teaching evaluation by instructor from paper to online.
Some of this deviation from a perfect relationship is likely sampling noise, especially in the smaller classes. However, a few classes did show statistically significant gains or drops. Dropping out the very low N cases (classes with fewer than 15 responses), we have 8 classes that showed statistically significant changes in mean Overall teaching effectiveness ratings from paper to online: 4 were increases and 4 were decreases. The increase vs. decrease cannot be attributed to whether the class experienced a large drop in response rates; considering only large response drop rate cases, 2 classes had significant increases in the mean rating and 2 had decreases. The most likely explanation for these few instances of a clear shift in mean ratings is variability in rating means from semester to semester: changing student populations or changing instructor practices. Ideally, to assess this explanation, it would be useful to see stability of instructor means for a course from one semester to the next purely in paper format for both semesters.

**Did the distribution in evaluations change?**

Some prior research in this area has suggested that there may be changes in the distribution of ratings, either because students who tend not to come to class now can give ratings or because students can be more reflective about their ratings when doing so outside of class or because student ratings are more random because they are doing the ratings while engaged in other tasks (e.g., listening to another lecture, watching TV, listening to music). We examine this issue by looking at the standard deviation of ratings inside a class: if more very high and very low ratings are added, the standard deviation will increase.

There is a small trend to have higher spread of ratings in the online format, but *overall, there was no significant effect of format on the spread of ratings, with a mean of 0.96 in the online format and a mean of 0.89 paper format (on the 1-5 scale of overall teaching effectiveness)*, Cohen’s d=0.2, p>.25.

This same basic null effect on variability of ratings in a class held across unit, class size, and student level, (see Figure 5). That is, the overall ratings in a class were equally spread for paper and online cases throughout. None of the small trends of context were statistically significant and none of the cases themselves differed significantly from zero change.
Figure 5. Mean change (with standard error bars) in overall variability of teaching ratings (standard deviations) from paper to online as a function of unit, class type, student level, and class size.

Another way to ask the question is to consider the cases in which there was a large change in response rate. Perhaps in those contexts there is more change in ratings. In the one class that saw the largest drop in response rate, there was also a large change in variability of ratings. However, overall there is no significant relationship between change in response rate and change in standard deviation of ratings in a class (see Figure 6).

Figure 6. Change in standard deviations of ratings (from paper to online) as a function of change in response rates (from paper to online) for each class.
Summary and Recommendations

Overall, the main effect of the move from paper in-class to online out-of-class appears to be a large decrease in the response rate, particularly for small and medium classes (i.e., those with enrollments of fewer than 100 students show drops of approximately 25% or Cohen's d=2). There does not appear to be any changes in ratings in terms of their means, the consistency of ratings across instructors, or the distribution of ratings.

In terms of being able to effectively evaluating the student perspective on the quality of teaching, the main remaining viable concern appears to the drop in response rate for the smallest classes. In these cases, reducing the number of respondents will add significant noise to the means being computed. For example, consider a class of 20 students. We expect to have 16 ratings from a paper in-class administration (mean rate of 81% for small classes), but only 11 ratings from online out-of-class administration (mean rate of 55% for small classes). One or two particularly unhappy students will have a larger effect on the 11 rating case than on the 16 ratings case, with a similar story for unusually positive ratings. That is, we are less likely to get a true estimate of the whole classes view of the instructor when we only have 11 respondents than 16 respondents. When classes become noticeably larger, having only half the students respond will still produce a statistically precise estimate of the mean rating.

Therefore, either new methods need to be developed and tested for encouraging participation in the online testing for small classes, or paper in-class should perhaps remain the format of choice for small classes. For medium and large classes the shift to online appears safe under the currently tested approach. However, cost is also a consideration; the in-class approach is much more expensive and the small increase in accuracy may not be worth the additional expense. Indeed, in the current pilot, the online mean evaluations correlated highly with paper evaluations even in the case of small classes (r=.63).
Appendix D

Analysis of Written Comment Length, March 22, 2012
Analysis of Written Comment Length  
Christian Schunn, LRDC  
March 22, 2012

Student evaluations of teaching have a strong summative, numerical focus, but they also contain important written formative feedback to the instructor. In considering the effects of format changes on this written formative feedback as well.

In the transition from in-class paper based evaluations to online, out-of-class evaluations, the in-class to out-of-class element of the transition is most plausibly influential on the amount of feedback that students provide. When students are doing the activities in other settings, they have different time pressures, which influence amount of reflection and writing they do. However, it is important to note that as the online out-of-class evaluation have lower response rates, the total amount of feedback obtained is potentially reduced. But, as the proportion of students who complete the evaluation goes down, we may see that students who have little to say in terms of evaluation could be less likely to complete the evaluation, so the impact of fewer evaluations on total feedback might not be so large. Overall, therefore, it is likely that we need to consider both the length per student responding and the total amount of feedback per course.

<table>
<thead>
<tr>
<th>Class size</th>
<th>School</th>
<th>Median Comment Length (in words)</th>
<th>% of students with no comments</th>
<th>Actual total # of Words</th>
<th>% students completing OMETS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Paper</td>
<td>Online</td>
<td>Paper</td>
<td>Online</td>
</tr>
<tr>
<td>22</td>
<td>A&amp;S</td>
<td>36</td>
<td>41</td>
<td>9%</td>
<td>41%</td>
</tr>
<tr>
<td>265</td>
<td>A&amp;S</td>
<td>17</td>
<td>28</td>
<td>59%</td>
<td>51%</td>
</tr>
<tr>
<td>26</td>
<td>A&amp;S</td>
<td>46</td>
<td>47</td>
<td>30%</td>
<td>42%</td>
</tr>
<tr>
<td>42</td>
<td>Engineering</td>
<td>27</td>
<td>47</td>
<td>7%</td>
<td>48%</td>
</tr>
<tr>
<td>20</td>
<td>Engineering</td>
<td>14</td>
<td>54</td>
<td>76%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Comment length data was obtained from 5 classes participating in the pilot, representing large and small classes, in both A&S and Engineering. One of these classes, the last one in the table above, is a bit of an anomaly, in that very few students responded to the paper survey, and it should treated separately.

Comment length data, as a form of count data, has a skewed distribution (i.e., many short comments, and a few very long comments). Therefore medians are most appropriate in considering how length changed on average. We see in the table that 3 of the 5 classes had large increases in median comment length, with the other two showing small increases.

Following the general trend of lower response rates in online evaluation (also generally true in this set, as shown in the far right of the table), in 3 of the 5 classes, as higher
percentage of students provided no written comments. Interestingly, approximately 30% of students across classes in the provided ratings but no comments in the online case, whereas this kind of behavior is relatively rare with in-class paper evaluations.

Together, these two patterns cancel each other out on average, such that sometimes online evaluations produce more total words of feedback for the instructor but sometimes in paper produce more total words of feedback. As a result, there appears to be no net benefit or harm that results from the shift from in-class paper to online evaluations in terms of amount of feedback to the instructor.
Appendix E

*Stability of Ratings, February 24, 2012*
On 2/24/12 8:37 PM, "Schunn, Christian Dieter" <schunn@pitt.edu> wrote:

Dear all,

Earlier this week, Nancy Reilly sent me the paper OMET data of our pilot classes from two years before the online pilot so we could look at stability of ratings from year to year when paper is held constant (Thanks Nancy!; apparently this required considerable digging through off-site storage and hand-entering data). There were 24 classes that had paper surveys done in AY 2009-10 that were part of the group of 43 classes that had paper surveys in AY 2010-11 and an online survey in Fall 2011. Recall that mean ratings for each class obtained via online methods correlated around r=.6 with mean ratings obtained on paper/in class. The question was whether this r=.6 being less than a perfect r=1.0 reflects normal semester to semester variability in ratings (from changes in teaching, changes in students, or sampling error) or whether the shift to online caused additional variation in the class means.

Drum roll, please. And the results are:

Basically, the stability in mean class ratings was actually slightly lower when comparing paper to paper across years (r=.5) than when comparing paper to online. Statistically speaking, they are basically the same (when N=24, there is a little more noise in the estimate). So, now I feel quite confident that the shift to online does not disrupt the overall mean evaluation that a given instructor will receive: ratings normally vary from year to year for a given instructor teaching the same class, and the change to online appears to have no additional influence on changes in ratings.

Incidentally, there is a fair amount of variability in responses rates for a given class from year to year even when it was done all on paper / in-class, even in the big classes, even though the overall average response rate across classes remained stable from year to year (about 75%).

Best,
-Chris