

Online Course Evaluations and Response Rates

What are the benefits of conducting instructor/course evaluations online?

Compared to paper-based evaluations, online evaluations have obvious advantages such as requiring no class time, providing more timely feedback and being less expensive to administer. In addition, research suggests that students prefer completing the evaluations outside of class because it allows them more time to think about their answers. According to a study conducted by the University of Minnesota (Ernst, 2005), students felt rushed when completing the evaluation in class:

“I want to get out of this class because it’s the last 15 minutes, last day, last semester. You know you just want to go... Whatever it is, it’s like ‘OK, I know these questions. Whatever. Blah, blah, blah.”

“... [S]omeone else would collect [the paper evaluations] when everyone’s done, which can be a tad bit intimidating if you have a lot to say and they’re waiting for you to turn yours in.”

On the contrary, students who completed the survey electronically were consistently more likely to provide comments about their course and instructor (Donovan, Mader, & Shinsky, 2006; Ernst, 2005; Anderson, Cain, and Bird, 2005). For example, a study shows 63 per cent of online respondents provided open-ended comments, compared to less than 10 per cent of those who completed the evaluations in class. In addition, the length of open-ended comments for online evaluations was greater than those from the paper-based evaluations (Johnson, 2002).

Therefore, compared to paper-based evaluations conducted in class, online evaluations tend to have significantly greater quantity and quality of open-ended comments. This can be particularly useful for instructors to identify strengths and areas that require improvement.

Do response rates differ for online evaluations and in-class, paper-based evaluations?

Research shows that **response rates are generally lower when an online instrument is used**, as compared to an in-class, paper-based instrument (Nulty, 2008; Anderson, Cain, & Bird, 2005; Ernst, 2006; Kulik, 2009; Benton, et al, 2010).

Online survey response rates vary significantly among institutions. Some institutions reported response rates as low as 20 per cent (Nulty, 2008), while others were more successful by achieving response rates that were greater than 70 per cent (Kulik, 2009). A recent report prepared by McGill University indicated that the overall response rate at the institution level

was 44 per cent for winter 2010, with response rates for individual colleges ranging from 27 per cent to 48 per cent (McGill University, May 2010).

Are lower response rates less representative of the entire population?

In general, **the concern regarding response rates can be interpreted as the concern regarding whether those who have participated in a survey are representative of the entire population.** In other words, if those who do not respond to the survey (non-respondents) have very different views than those who do, then the results from the survey would not reflect the opinion of the population as a whole. For this reason, higher response rates are generally more desirable in order to minimize the potential effect of non-response bias.

However, the link between response rate and non-response bias has not been theoretically established. In fact, a growing body of empirical evidence suggests that lower response rates do not necessarily lead to results that are less representative of the population. For example, the average response rate for telephone surveys in Canada was only 12 per cent in 2002, continuing the declining trend over recent years (Marketing Research and Intelligence Association, October 2003). Nevertheless, results from many high profile public opinion polls conducted by telephone remain highly consistent with the outcomes of elections (MRIA, 2011). Researchers offer two possible explanations for this. First, as non-response grows, non-respondents become a larger group and less distinctive from respondents. Since there is little difference between the two groups, survey results can be generalized (Curtin et al., 2000). Secondly, even if respondents and non-respondents are demographically different, it will not produce biased results if they do not differ on the dimensions or variables that are of interest to the researchers (Langer, 2003; Holbrook et al., 2005). For instance, if the opinions of male and female students are not different, even if there are more female respondents in the sample, the results from the survey would still be representative.

How do response rates impact the accuracy of data?

Although there is little evidence that supports the association between response rate and the **representativeness** of survey results, in course evaluations, low response rate does present a concern regarding the **accuracy** of data. Because of the relatively small number of students in a course, lower response rates mean lower numbers of respondents, or smaller **sample size**, which leads to greater margin of error of the results. **Margin of error**, along with **level of confidence**, is used to measure statistical precision of survey results. For example, if your survey results have a level of confidence of 95% and a margin of error of +/-10%, and your survey shows 80% of the students are satisfied with the instructor, you can be 95% sure that between 70% and 90% of the students are satisfied.

In addition to sample size, margin of error and level of confidence are also determined by the **size of the population**, especially when the population size is small. The table below shows the sample size needed for different class sizes to achieve a margin of error of +/-10% at a 95% confidence interval.

| Margin of error | Class size | # of Respondents required | Response rate required |
|-----------------|------------|---------------------------|------------------------|
| +/-10% | 25 | 20 | 80% (20/25) |
| +/-10% | 50 | 33 | 66% (33/50) |
| +/-10% | 100 | 49 | 49% (49/100) |
| +/-10% | 200 | 65 | 33% (65/200) |

As you can see, for a class that has 25 students, it requires an 80% response rate in order to achieve a margin of error of +/-10%, while for a class of 200 students, it only requires 33%. **Therefore, the larger the class size, the smaller the proportion of students needed to respond in order to achieve a certain level of margin of error.** It is also worth noting that the calculation above is the “worst case scenario” when respondents’ opinions are equally divided (i.e. 50% are satisfied and 50% are not). If the opinions are skewed one way or the other (i.e. 80% are satisfied and 20% are not or vice versa), the margin of error will be smaller.

Do online evaluation results tend to be more negative than in-class, paper-based evaluations?

Because online course evaluations are completed out of class and are usually not mandatory, some faculty members are concerned that students who are strongly negative about the course or the instructor would be the most likely group to complete the online evaluation, and thus lead to a lower overall rating for the instructor. Results from many studies on this topic have proven this to be a misconception, with results from online evaluations shown to be as trustworthy as those from paper-based evaluations (Liu, 2005; Thorpe, 2002; Johnson, 2002). For example, **a large scale study of the results of the Individual Development and Educational Assessment (IDEA) student rating system between 2002 and 2008 (Benton et al., October, 2010) examined a total of 651,587 classes that used paper-based evaluations and 53,000 classes that used web-based evaluations. This comparison showed no meaningful differences between survey methods. Another study by Ernst (2006) showed that students who used online evaluations were marginally more likely to choose lower ratings on the rating scales; but at the same time, they were also more likely to choose the highest ratings.** This suggests that students with both positive and negative experiences in the course were eager to provide feedback online. In comparing the mean scores between online and paper-based evaluations, this study found no significant differences.

In summary, the literature consistently shows that there is no bias due to the method of data collection. In other words, whether an online or paper-based instrument is used, students with a range of opinions about a course will complete the evaluation.

What can be done to improve response rates for online evaluations?

While online evaluations generally have lower response rates, research shows that there are many ways response rates can be improved, even to similar levels of in-class, paper-based evaluations. **Empirical evidence shows technology alone does not determine response rates, and the engagement of academic leaders and instructors can have a significant impact on students' participation.** For example, in Washington State University, **response rates during the pilot phases with volunteer faculty and chairs were consistently better than 80 per cent, while the response rate dropped down to 41 per cent when the entire faculty population became obligated to participate.** (Anderson, Brown & Spaeth, 2006). Similarly, Brown and Peterson (June, 2008) found in departments with the higher response rates, the chairs of the departments were involved in the design of the instrument and the decision to put it online. Another study at Brigham Young University also suggests that improved instructor and student engagement had helped response rates improve from 40 per cent to 62 per cent during three pilot projects (Johnson, 2002). The same study also showed a strong correlation between the level of communication and response rate:

| Communication | Response rate |
|--|---------------|
| Assigned students to complete online rating forms and gave them points for doing so | 87% |
| Assigned students to complete online rating forms but did not give them points | 77% |
| Encouraged students to complete the online forms but did not make it a formal assignment | 32% |
| Did not mention the online student-rating forms to students | 20% |

Overall, the literature has identified the following specific strategies that would help improve online response rates:

Showing evaluation matters

- Persuading respondents that their feedback is valued and acted upon. Students were more likely to respond if they believed ratings would be used for decisions about courses and faculty members (Johnson, 2002);

- Using a mid-semester course evaluation, making changes in the course on the basis of students' feedback during the semester;
- Providing students access to the numeric results of the evaluation.

Communication

- Including course evaluation period dates in class schedule/course outline;
- Distributing a handout to students two to three weeks prior to the last day of classes with instructions and explaining the value of completing the evaluations;
- Announcing the online evaluation in class and spending a few minutes discussing the instruction;
- Providing frequent reminders.

Making it easy for students

- Providing the link to the survey in the email;
- Providing access to computer labs or asking students to bring their laptops to class for the evaluation;
- Providing a space for the online evaluation on the electronic syllabus (or on the course management tool);
- Allowing a longer period of online evaluation.

Providing incentives

- Providing extra credit/points for those who complete the forms. When a completion incentive is implemented, student response rates improve dramatically over those for traditional evaluation methods (Anderson, Cain & Bird, 2005);
- Providing students who have completed the evaluation earlier access to grades.

References

- Anderson, H. M., Cain, J. & Bird, E. (2005). Online student course evaluations: Review of literature and a pilot study. *American Journal of Pharmaceutical Education*, 69 (1), 34-43. Retrieved from <http://www.ajpe.org/aj6901/aj690105/aj690105.pdf>
- Anderson, J., Brown, G. & Spaeth, S. (2006). Online student evaluations and response rates reconsidered. *Innovate*, 2(6). Fischler School of Education and Human Services, Nova Southeastern University. Retrieved from http://innovateonline.info/pdf/vol2_issue6/Online_Student_Evaluations_and_Response_Rates_Reconsidered.pdf
- Benton, S., Webster, R., Gross, A. & Pallett, W. (2010). An analysis of IDEA student ratings of instruction using paper versus online survey methods 2002-2008 data. *IDEA Technical Report No. 16*. The IDEA Center, Kansas State University.
- Brown, G. & Peterson, N. (June, 2008). Online course evaluations and response rate considerations. Centre for Teaching, Learning & Technology, Washington State University. Retrieved from <http://wsuclt.wordpress.com/2008/06/20/online-course-evaluations-and-response-rate-considerations/>
- Cashin, W. (1995). Student ratings of teaching: The research revisited. *Idea Paper No. 32*, Center for Faculty Evaluation and Development, Division of Continuing Education, Kansas State University. Retrieved from <http://www.jstor.org/stable/pdfplus/3078736.pdf?acceptTC=true>
- Coffey, M. & Gibbs, G., (2001). The evaluation of the Student Evaluation of Educational Quality questionnaire (SEEQ) in UK higher education. *Assessment & Evaluation in Higher Education*, 26, 89-93.
- Curtin, R., Presser, S. & Singer, E. (2000). The effects of response rate changes on the Index of Consumer Sentiment. *Public Opinion Quarterly* 64(4), 413-428. Retrieved from <http://www.jstor.org/stable/pdfplus/3078736.pdf?acceptTC=true>
- Donovan, J., Mader, C. E., & Shinsky, J. (2006). Constructive student feedback: Online vs. Traditional course evaluations. *Journal of Interactive Online Learning*, 5(3), 283-295. Retrieved from <http://www.ncolr.org/jiol/issues/pdf/9.3.3.pdf>
- Ernst, D. (October. 10, 2006). Student evaluations: a comparison of online vs. paper data collection. Presentation at the EDUCAUSE Annual Conferences, Dallas Oct. 9-12, 2006. Retrieved from <http://www.educause.edu/Resources/StudentEvaluationsAComparisono/156307>

Holbrook, A., Krosnick J., & Pfent A. (2007). The causes and consequences of response rates in surveys by the news media and government contractor survey research firms." In Lepkowski, J. M., Tucker, N. C., Brick, J. M., De Leeuw, E. D., Japac, L., Lavrakas, P. J., Link, M. W., and Sangster, R. L. (ed.) *Advances in telephone survey methodology*. New York: Wiley.

Johnson, T. (2002). Online student ratings: Will students respond? Paper presented at American Educational Research Association Annual Meeting, 2002. Retrieved from http://www.armstrong.edu/images/institutional_research/onlinesurvey_will_students_respond.pdf

Keane, E. & Labhrainn, I. M. (2005). Obtaining student feedback on teaching & course quality. Centre for Excellence in Learning & Teaching, National University of Ireland, Galway. Retrieved from http://www.nuigalway.ie/celt/documents/evaluation_ofteaching.pdf

Kulik, J. (2009). Response rates in online teaching evaluation systems. Office of Evaluations and Examinations, The University of Michigan. Retrieved from <http://www.umich.edu/~eande/tq/ResponseRates.pdf>

Langer, G (2003). About response rate: Some unresolved questions. *Public Perspective, May/June 2003*, 16-18. Retrieved from http://www.aapor.org/AM/Template.cfm?Section=Do_Response_Rates_Matter_&Template=/CM/ContentDisplay.cfm&ContentID=1287

Lawall, M.L. (2006). Students rating teaching: how student feedback can inform your teaching. University Teaching Services, The University of Manitoba.

Liu, Y. (2005). A Comparison Study of Online versus Traditional Student Evaluation of Instruction. In P. Kommers & G. Richards (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2005* (pp. 3586-3591). Chesapeake, VA: AACE.

Market Research & Intelligence Association (2011). There's No Margin of Error on the Truth. Retrieved from <http://www.mria-arim.ca/NEWS/2011-HillTimesAd.asp>

Market Research & Intelligence Association (October, 2003). Telephone refusal rates still rising: Results of the 2002 Response Rate Survey. Retrieved from <http://www.mria-arim.ca/COMMITTEES/ResponseArticle01.asp>

Marsh, H. W. (1984). Students' evaluations of university teaching: Dimensionality, reliability, validity, potential biases, and utility. *Journal of Educational Psychology, 76*(5), 707-754.

- Marsh, H. W. & Beiley, M. (1993). Multidimensional students' evaluations of teaching effectiveness: A profile analysis. *The Journal of Higher Education*, 64(1) (Jan –Feb 1993), 1-18. Ohio State University Press. Retrieved from www.jstor.org/stable/2959975
- McGill University (July, 2009). FAQs about Response Rates and Bias in Online Course Evaluations. Teaching and Learning Services. Retrieved from <http://www.mcgill.ca/files/tls/ResponseRatesandBiasOnlineCourseEvaluationsJuly09.pdf>
- McGill University (May 2010). Mercury report on response rate, Academic Year 2009-2010. Teaching and Learning Services. Retrieved from <http://www.mcgill.ca/files/tls/MercuryReport0910.pdf>
- McGill University. Strategies to increase online response rate. Teaching and Learning Services. Retrieved from <http://www.mcgill.ca/tls/courseevaluations/strategies/>
- Mondschein, H. (January 2009). Literature review: Online course evaluation response rates. California Lutheran University. Retrieved from http://74.125.155.132/scholar?q=cache:sVDDYGgLo4J:scholar.google.com/+Literature+review:+Online+course+evaluation+response+rates&hl=en&as_sdt=0.5
- Nulty, D. (2008). The adequacy of response rates to online and paper surveys: what can be done?. *Assessment & Evaluation in Higher Education*, 33(3), 301-314.
- Purdue University, Calumet. Improving response rates. Retrieved from http://ctis.calumet.purdue.edu/osika/course_eval/response_rates.htm
- Teaching and Learning Services, McGill University (2007). Effective and appropriate use of student ratings of instruction: Research based suggestions. Retrieved from http://www.mcgill.ca/files/tls/Interpretation_student_ratings.pdf
- The Chronicle of Higher Education (May 6, 2010). Online evaluations show same results, lower response rate. Retrieved from <http://chronicle.com/blogs/wiredcampus/online-evaluations-show-same-results-lower-response-rate/23772>
- The IDEA Center. Best practice for online evaluation. Kansas State University. Retrieved from <http://www.theideacenter.org/sites/default/files/Best%20Practices%20for%20Online%20Response%20Rate.pdf>

Thorpe, S.W. (2002). Online student evaluation of instruction: An investigation of non-response bias. Paper presented at 42nd Annual Forum for the Association for Institutional Research, 2002; Toronto, Ontario, Canada. Retrieved from <http://www.airweb.org/forum02/550.pdf>