Top 20 Strategies to Increase the Online Response Rates of Student Rating Scales

Ronald A. Berk The Johns Hopkins University

Over the past decade, a conversion from paper-andpencil to online administration of student rating scales has been taking place at hundreds of institutions worldwide. Probably the most serious problem that has emerged is low response rates compared to the previous in-class administrations. Faculty and administrators have addressed this problem by experimenting with several techniques to increase rates, including a variety of incentives and disincentives for students to complete the forms. This online issue began with face-to-face (F2F) courses, but now is occurring with online and blended/hybrid courses as well. This article is a state-ofthe-art review of this problem. The proposed techniques and all of the related issues will be examined in the context of the accumulated research and current practices. This review will culminate in a "Top 20" list of the most promising strategies along with suggestions for assuring high response rates from year to year.

Keywords: student evaluation of teaching (SET), student ratings, online administration, teaching effectiveness, face-to-face courses, blended courses, hybrid courses, Web-based courses, distance learning

INTRODUCTION

The research on student rating scales has been accumulating for 90 years (Freyd, 1923). Over the past decade, the conversion from paper-and-pencil to online administration of these scales has been taking place at hundreds of institutions worldwide. This trend began predominantly with face-to-face (F2F) courses, but has slowly spread to the evaluation of online and blended/hybrid courses. The online administrations have encountered a few problems that challenge the reliability and validity of the results (Berk, 2013). This article examines the most pervasive problem: low response rate.

ONLINE ADMINISTRATION OPTIONS

Online administration of student rating scales has been executed either by an inhouse IT system or by an out-house vendor specializing in online administration,

analysis, and score reporting, such as CollegeNET (What Do You Think?), ConnectEDU (courseval), Evaluation-KIT (Online Course Evaluation and Survey System), and IOTA Solutions (MyClassEvaluation). Even the choice of the course management system is crucial in providing the anonymity for students to respond, which could boost response rates (Oliver & Sautter, 2005). All commercially-developed scale packages also provide online administration, along with the scale and other delivery services. Those scales include Student Instructional Report II (SIR II), Course/Instructor Evaluation Questionnaire (CIEQ), IDEA Student Ratings of Instruction, and Student Evaluation of Educational Quality (SEEQ) (Berk, 2006).

WHAT'S THE PROBLEM?

The problem is that response rates for online administrations have been consistently lower than their paper-and-pencil predecessor, where the instructor controlled the in-class response rate with a student administrator and collector. In some cases, these rates for F2F courses have dipped to 50% and even lower (Anderson, Cain, & Bird, 2005; Benton, Webster, Gross, & Pallett, 2010; Heath, Lawyer, & Rasmussen, 2007), which render them useless for any decision making. Faculty members at various institutions have used that excuse to resist the online conversion. Experience with the online administration process has yielded a variety of strategies to increase response rates, including incentives and disincentives for students to complete the scales, which have now crept back up to the 70s and even 90s at several institutions.

This article examines the state-of-the-art of response rates. Given its importance in considering online administration of scales and its impact on the psychometric quality and interpretation of results, administrators and faculty have experimented with a wide range of techniques to increase rates. These techniques and several related issues will be reviewed in the context of the accumulated research and current practices in the evaluation of teaching effectiveness. This review will highlight a "Top 20" list of the most promising strategies and then proffer guidelines for their application in any institution. The response rate aftermath will also be examined with suggestions for assuring high response rates from year to year.

LOW RESPONSE RATES

WHAT'S WRONG WITH LOW?

The problem with low response rates is that they provide an *inadequate data base* from which to infer teaching effectiveness from the scores on a student rating scale as well as other measures. If the percentage of responses is too small, the sampling error can be frightfully large and the representativeness of the student responses can be biased. The nonresponse bias also becomes a concern. The error (reliability) and biases (validity) significantly diminish the usefulness of the ratings and make administrators unhappy. Those psychometric deficiencies can undermine the evaluation process.

WHAT ARE THE REASONS?

The research on this topic indicates the following possible reasons students fail to respond to rating scales: apathy, technical problems, perceived lack of anonymity, lack of importance, inconvenience, inaccessibility, and time for completion (Adams & Umbach, 2012; Avery, Bryan, Mathios, Kang, & Bell, 2006; Ballantyne, 2002, 2003; Dommeyer, Baum, & Hanna, 2002; Sorenson & Reiner, 2003). When students do not complete the

rating scales for any of those excuses, legitimate or illegitimate, response rates plummet. Recent improvements in the technical design and execution of online delivery systems have reduced and, in some cases, eliminated those perceptions at some institutions, but they still exist at most where comprehensive administration procedures have not been implemented to systematically address those reasons.

Faculty members also have had concerns that dissatisfied students are more likely to respond than other students (Johnson, 2003). This possible negative response bias was not supported by Kherfi (2011) and Benton et al.'s (2010) study that found very low correlations between response rate and student ratings.

STATISTICAL ISSUES

Although the minimum response rate based on sampling error for a seminar with 10 students may be different from a class with 50, 100, or larger, rates in the 80–100% range will be adequate for most any class size. Statistical tables of response rates for different errors and confidence intervals are available (Nulty, 2008).

Unfortunately, the rules of survey sampling do not provide a simple statistical answer to the response rate question for online rating scales. The class (sample) size that responds in relation to the class (population) size is not the only issue. There are at least two major sources of error (or unreliability) to consider: (1) standard error of the mean rating based on sample size and (2) standard error of measurement based on the reliability of the item, subscale, or total scale ratings. Confidence intervals can be computed for both.

In typical survey research, inferences about characteristics of the population are drawn from the sample statistics. Only decisions about groups are rendered; not about individuals. In contrast, the inferences from sample (class) ratings are used for teaching improvement (formative) and important career (summative) decisions about individual professors. The response rate for one type of decision may not be adequate for other types of decisions (Berk, 2013).

CURRENT RESPONSE RATES

So what is the current state of practice at many institutions? The response rates for online administration have been reported in the 50s compared to 70s-80s for paper-based administration (Benton et al., 2010). The online rates have been consistently lower than paper at several institutions (Anderson et al., 2005; Avery et al., 2006; Mau & Opengart, 2012; Morrison, 2011; Nowell, Gale, & Handley, 2010; Nulty, 2008; Sax, Gilmartin, & Bryant, 2003; Sid Nair, Adams, & Mertova, 2008; Stowell, Addison, & Smith, 2012). These rates can sabotage the teaching evaluation process. The low rates are a frequent objection to online ratings reported in faculty surveys (Crews & Curtis, 2011). Fear of low response rates has been one of the major deterrents why some institutions have not adopted online systems. What can be done to improve these rates?

TOP 20 STRATEGIES TO BOOST RESPONSE RATES

Survey researchers have examined the use of a variety of incentives (Toepoel, 2012) in online surveys (Bennett & Sid Nair, 2010; Van Selm & Jankowski, 2006), including vouchers and lottery prizes (Deutskens, de Ruyter, Wetzels, & Oosterveld, 2004; Gajic, Cameron, & Hurley, 2011; Laguilles, Williams, & Saunders, 2011), as pre- and postincentives (Sánchez-Fernández, Muñoz-Leiva, Montoro-Ríos, & Ibáñez-Zapata, 2010), compared to disincentives and no incentive. Guess what? Vouchers and a lottery with a small number of large prizes or small prizes with a higher chance of winning generate the highest response rates. Although these and other incentives can contribute to raising rates to varying degrees in surveys, they have not been studied with online student rating scales.

Administrators, faculty, and students at several institutions have tested a variety of strategies to increase the response rate of online administrations. Here are 20 of the most effective strategies (Adams, 2012; Adams & Umbach, 2012; Berk, 2006, 2013; Dommeyer, Baum, Hanna, & Chapman, 2004; Johnson, 2003; Sorenson & Reiner, 2003; The IDEA Center, 2008). They are grouped according to the person responsible for executing the strategy—the coordinator or director of the online system AND faculty and administrators.

COORDINATOR/DIRECTOR OF ONLINE SYSTEM

- 1. Institution/department/external vendor coordination and management of online system must be independent of faculty to monitor the entire process (Berk, 2006)
- 2. Specifies purpose(s) of ratings (teaching improvement, salary, promotion, tenure) in the scale's directions (Benton & Cashin, 2012; Berk, 2006), despite the minimal effects on ratings (Centra, 1976; Marsh, 2007)
- 3. Assures ease of computer access and navigation on campus (Sorenson & Reiner, 2003)
- 4. Monitors use of technology (PCs/Macs, iPads, etc.) and procedures for in-class administration (The IDEA Center, 2008)
- 5. Assures anonymity and confidentiality (Adams, 2012; Berk, 2006; Sorenson & Reiner, 2003; The IDEA Center, 2008)
- 6. Provides instructions on how to use the system (Dommeyer et al., 2004; Johnson, 2003; Norris & Conn, 2005)
- 7. Maintains a convenient, user-friendly system (Layne, DeCristoforo, & McGinty, 1999; Ravelli, 2000; Sid Nair & Adams, 2009; Sorenson & Reiner, 2003)
- 8. Sends reminders to all students before window of response opens, then frequent reminders during window to only students who have not responded (Adams, 2012; Cook, Heath, & Thompson, 2000; Dommeyer et al., 2004; Sid Nair et al., 2008)
- 9. Plans ad campaigns to inform students of process online and in student publications (The IDEA Center, 2008)
- 10. Provides school-wide incentives, such as a lottery for an iPad, iPhone, or some other iGadget, bookstore items, or food coupons (Ballantyne, 2003; Johnson, 2003)
- 11. Acknowledges and rewards faculty and/or departments that meet target response rate (The IDEA Center, 2008) (*NOTE*: Make sure this "healthy competition" doesn't affect the integrity of the process.)
- 12. Promotes donor/alumni contributions of a dollar amount to a charity for every form completed (Ravenscroft & Enyeart, 2009)
- 13. Communicates the notion that assessment of teaching and the students' formal feedback in that process are part of the campus culture and their responsibility (The IDEA Center, 2008)
- 14. Permits students' early access to final course grades ASAP after course, usually by online posting (Anderson, Brown, & Spaeth, 2006; Berk, 2006; Dommeyer et al., 2004; Johnson, 2003)

FACULTY AND ADMINISTRATORS

- 15. Deans, department chairs, and faculty communicate to students the importance of their input (Berk, 2006; Johnson, 2003; Sorenson & Reiner, 2003)
- 16. Faculty emphasize the intended purpose(s) of the ratings (The IDEA Center,
- 17. Faculty strongly encourage students and remind students to complete forms (Adams, 2012; The IDEA Center, 2008)
- 18. Faculty "assign" students to complete forms as part of course grade (Ravenscroft & Enyeart, 2009)
- 19. Faculty provide positive incentives, such as extra credit or points or dropping a low grade on an assignment or quiz (Dommeyer et al., 2004; Johnson, 2003; Prunty, 2011), movie or restaurant vouchers, cruise tickets, or vacation package to Rio
- 20. Faculty set an in-class time to simulate the "captive audience" concept of the paper-and-pencil administration, but this time with laptops, iPads, or iPhones to complete forms; also computer lab or chat-room times can be reserved for this purpose (The IDEA Center, 2008)

APPLICATION OF STRATEGIES

As you process the preceding list, there will be several strategies that may strike your fancy (cruise and trip to Rio) and fit into your online system. However, there are others that may incite you to riot because they may be perceived as unethical ("assign" students or dropping a low grade), somewhat questionable (vouchers and lotteries), or even illegal (bribes and early access to grades).

Which ones should you pick? The next section proffers some concrete guidelines.

COMBINATIONS OF STRATEGIES

There is no evidence-based or best-practices model at present to suggest all 20 strategies or a specific generic combination will solve the response rate problem in every institution. Certainly no one has used all 20, since they were compiled in this article for the first time. However, researchers and administrators have tested a variety of combinations in the context of evaluating teaching effectiveness. Their reports indicate the following guidelines for implementing the 20 strategies:

- a. Strategies 1-8: Administrative and organizational procedures are essential to address most of the aforementioned reasons many students do not respond. These must be considered by every institution to convey the importance of responding and eliminate any technical issues that would hinder students from completing scales quickly and without glitches. Commitment by all faculty stakeholders is crucial.
- b. Strategies 9-13: These system-wide incentives yield variable increases in response rates. Your faculty must decide which incentives should be applied or tested across all courses. The rates may not be consistent in every department. Their procedures, execution, and results should be documented to assess their efficacy and replicability for future semesters.
- c. Strategy 14: Early posting of grades has produced the highest increase of any single strategy. This system-wide incentive has been reported by numerous institutions to be extremely effective. It is contingent upon the registrar's gradeprocessing schedule. If the registrar posts grades within a week after final exams

- and projects at the end of the semester, then the incentive is gone. Intentionally delaying that posting is questionable. There are also legal issues involved in withholding grades which have been raised in countries outside the U.S.
- d. *Strategies 15–17:* Administrators and faculty should coordinate communication to students on the importance of responding to overcome their apathy. This is highly recommended and one of the reasons students do not bother to respond. They are not convinced their ratings will make any difference to improve teaching. Faculty should also follow-up with reminders in their classes.
- e. *Strategies 18–19:* These course-specific incentives are the most contentious nationally and internationally. They have been used in individual courses, but not system-wide, with highly variable increases in response rates. Your faculty should discuss the merits of these incentives for their classes. They have ethical and legal implications related to course objectives, content, and grading.
- f. Strategy 20: These in-class administration options can produce response rates comparable to the paper-based version of yesteryear. They are applicable to F2F and blended courses, but not online courses. Many professors are comfortable with this in-class administration because it retains the best of both worlds. To assure standardized administration conditions, your faculty must agree to systemwide administration in-class (or computer lab) OR online, but not a mix of both.

PICK THE "RIGHT" COMBINATION

Overall, it is the right combination of administrative procedures and incentives that can yield response rates in the 70s–90s. The administrator of the online system and faculty must carefully review and discuss all of the preceding options to decide on what is the "right" combination of strategies for their particular program. What is right for your institution may not be right elsewhere. It should receive the *commitment of all stakeholders* involved in the process and be compatible with your campus culture. The system must then be executed properly to assure a high RSOI (rate of student return on the online investment).

RESPONSE RATE AFTERMATH: WHAT'S NEXT?

Once tested, a systematic evaluation of all of the strategies should be conducted to determine what needs to be changed to improve the combination. However, once a defensible response rate has been achieved, the formula that produced it should be replicable. What will be the future rates semester after semester? Two key factors must be considered: (1) students' expectations and (2) system accountability.

STUDENTS' EXPECTATIONS

Once the system is implemented, your job isn't over. I bet you were packing your bags for Rio. Too bad. Instead, think about how the students will remember their "rating experience." This applies to all courses—F2F, online, and blended/hybrid. If the experience was positive and meaningful, then they'll probably participate the next semester; if it was negative due to administrative or technical problems, too time-consuming, perceived as a waste of time, or infringed on party activities, then expect response rates to nose-dive, again. The latter reasons for nonresponse can implode the evaluation program. The combination of strategies chosen is intended to eliminate those reasons.

The design and operation of the online administration will be major determinants of whether students will continue to complete the rating scales. Their expectations about how the results will be used are also critical to future response rates. Chen and Hoshower (2003) found that students' motivation to participate in the rating system hinged on the following semi-observable outcomes (in order of decreasing importance): (1) improvements in teaching, (2) improvements in course content and format, and (3) faculty personnel decisions (promotion, tenure, salary increase).

SYSTEM ACCOUNTABILITY

How will your system respond to your students' expectations? That response will affect their behaviors and future response rates. The bottom line relates to the instructional changes made as a result of the students' ratings.

Changes. The efforts to make changes and the actual changes that occur based on the results are often referred to as "closing the loop" (Bennett & Sid Nair, 2010). It builds credibility and administrative accountability into the system. The changes convey: "Student ratings are meaningful and important." Students' input or feedback really matters. They are engaged as active participants to provide evidence in the process of evaluating teaching effectiveness.

No changes. Students' iBalls and iPhones will be riveted on the follow-up actions taken by your administrators and faculty. Their texting grapevine is extremely effective. Contrary to the preceding scenario, suppose students do not see any results. Their expectations are explicit because the intended purposes of the ratings were stated in the directions on the scale. Those words need to be backed up with observable actions. If not, why should they bother to complete the scales the next time they're asked? If those purposes are not fulfilled, the response rates can plummet, again! Then you're back to where you started with low response rates.

CONCLUSIONS

Low response rates are a ubiquitous and thorny problem in the online administration of student rating scales and other measures in higher education world-wide. Over the past decade, a track record of research and practices occurring contemporaneously with the conversions from paper-and-pencil to online scale administrations produced a variety of strategies tested at institutions throughout the U.S. This article synthesized those strategies into an organized "Top 20" list with specific guidelines for their application to programs evaluating teaching effectiveness.

From that synthesis, six conclusions can be drawn about how to boost response rates:

- 1. No single strategy can address all of the reasons students fail to respond to rating scales.
- 2. There is no evidence-based or best-practices model to provide a generic combination of strategies that will be effective in every institution.
- 3. Administrators and faculty need to carefully scrutinize the various administrative, organizational, and incentive strategies to determine those that are most appropriate for their specific application, albeit, the "right" combination; that combination should be tested and evaluated.
- 4. The combination of strategies should significantly decrease or eliminate the students' reasons for not responding.
- 5. The combination that is adopted should have the commitment of all stakeholders.

6. An evaluation of students' expectations of the instructional changes to be made based on the results should be conducted to assure system accountability and future high response rates.

Overall, the students' role in completing the rating scales online should be viewed as an essential antecedent to the success of your teaching evaluation system. All of the preceding elements are interconnected and must mesh effectively to assure the seamless execution of the online administrations and high student response rates from year to year.

REFERENCES

- Adams, C. M. (2012). Online measures of student evaluation of instruction. In M. E. Kite (Ed.). *Effective evaluation of teaching: A guide for faculty and administrators* (pp. 50–59). E-book retrieved from the Society for the Teaching of Psychology website http://teachpsych.org/ebooks/evals2012/index.php.
- Adams, M. J. D., & Umbach, P. D. (2012). Nonresponse and online student evaluations of teaching: Understanding the influence of salience, fatigue, and academic environments. *Research in Higher Education*, 53(5), 576–591. (DOI: 10.1007/s11162-011-9240-5)
- 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), Article 5, 34–43. (http://web.njit.edu/~bieber/pub/Shen-AMCIS2004.pdf)
- Anderson, J., Brown, G., & Spaeth, S. (2006). Online student evaluations and response rates reconsidered. *Innovate*, 2(6). Retrieved from http://www.innovateonline.info/index.php?view=article&id=301.
- Avery, R.J., Bryan, W.K., Mathios, A., Kang, H., & Bell, D. (2006). Electronic course evaluations: Does an online delivery system influence student evaluations? *Journal of Economic Education*, *37*(1), 21–37. (DOI:10.3200/JECE.37.1.21-37)
- Bennett, L., & Sid Nair, C. (2010). A recipe for effective participation rates for webbased surveys. *Assessment & Evaluation in Higher Education*, 35(4), 357–365.
- Ballantyne, C. (2002, November). Why survey online? A practical look at issues in the use of the internet for surveys in higher education. Paper presented at the annual meeting of the American Evaluation Association, Honolulu.
- Ballantyne, C. (2003). Online evaluations of teaching: An examination of current practice and considerations for the future. In D. L. Sorenson & T. D. Johnson (Eds.), *Online student ratings of instruction* (New Directions for Teaching and Learning, No. 96)(pp. 103–112). San Francisco: Jossey-Bass.
- Benton, S. L., & Cashin, W.E. (2012). *Student ratings of teaching: A summary of research and literature* (IDEA Paper No. 50). Manhattan, KS: The IDEA Center. Retrieved April 8, 2012, from http://www.theideacenter.org/sites/default/files/idea-paper_50.pdf.
- Benton, S. L., Webster, R., Gross, A., & Pallett, W. (2010). *An analysis of IDEA Student Ratings of Instruction using paper versus online survey methods* (IDEA Technical Report No. 16). Manhattan, KS: The IDEA Center.
- Berk, R. A. (2006). Thirteen strategies to measure college teaching: A consumer's guide to rating scale construction, assessment, and decision making for faculty, administrators, and clinicians. Sterling, VA: Stylus.
- Berk, R. A. (2013). Top 10 flashpoints in student ratings and the evaluation of teaching: What faculty and administrators must know to protect themselves in employment decisions. Sterling, VA: Stylus.
- Centra, J.A. (1993). Reflective faculty evaluation: Enhancing teaching and determining faculty effectiveness. San Francisco: Jossey-Bass.

- Chen, Y., & Hoshower, L. B. (2003). Student evaluation of teaching effectiveness: An assessment of student perception and motivation. Assessment & Evaluation in Higher Education, 28(1), 71–88.
- Cook, C., Heath, F., & Thompson, R. (2000). A meta-analysis of response rates in webor internet-based surveys. Educational and Psychological Measurement, 60(6), 821– 836. (DOI:10.1177/00131640021970934)
- Crews, T. B., & Curtis, D. F. (2011). Online course evaluations: Faculty perspective and strategies for improved response rates. Assessment & Evaluation in Higher Education, 36(7), 865–878.
- Deutskens, E., de Ruyter, K., Wetzels, M., & Oosterveld, P. (2004). Response rate and response quality of internet-based surveys: An experimental study. Marketing Letters, 15(1), 21–36. (DOI: 10.1023/B:MARK.0000021968.86465.00)
- Dommeyer, C. J., Baum, P., Hanna, R. W., & Chapman K. S. (2004). Gathering faculty teaching evaluations by in-class and online surveys; Their effects on response rates and evaluations. Assessment & Evaluation in Higher Education, 29(5), 611-623. (DOI:10.1080/02602930410001689171)
- Freyd, M. (1923). A graphic rating scale for teachers. Journal of Educational Research, 8(5), 433–439.
- Gajic, A., Cameron, D., & Hurley, J. (2011). The cost-effectiveness of cash versus lottery incentives for a web-based, stated-preference community survey. European Journal of Health Economics. (DOI: 10.1007/s10198-011-0332-0)
- Heath, N., Lawyer, S., & Rasmussen, E. (2007). Web-based versus paper-and-pencil course evaluations. Teaching of Psychology, 34(4), 259–261. (DOI: 10.1080/00986 280701700433)
- Johnson, T. D. (2003). Online student ratings: Will students respond? In D. L. Sorenson & T. D. Johnson (Eds.), Online student ratings of instruction (New Directions for Teaching and Learning, No. 96)(pp. 49–60). San Francisco: Jossey-Bass.
- Kherfi, S. (2011). Whose opinion is it anyway? Determinants of participation in student evaluation of teaching. Journal of Economic Education, 42(1), 19–30.
- Laguilles, J. S., Williams, E. A., & Saunders, D. B. (2011). Can lottery incentives boost web survey response rates? Findings from four experiments, Research in Higher Education, 52(5), 537–553. (DOI: 10.1007/s11162-010-9203-2)
- Layne, B. H., DeCristoforo, J. R. & McGinty, D. (1999). Electronic versus traditional student ratings of instruction (Electronic Version). Research in Higher Education, 40(2), 221–232.
- Marsh. H. W. (2007). Students' evaluations of university teaching: Dimensionality, reliability, validity, potential biases and usefulness. In R. P. Perry & J. C. Smart (Eds.), The scholarship of teaching and learning in higher education: An evidencebased perspective (pp. 319–383). Dordrecht, The Netherlands: Springer.
- Mau, R. R., & Opengart, R. A. (2012). Comparing ratings: In-class (paper) vs. out of class (online) student evaluations. Higher Education Studies, 2(3). (DOI: 10.5539/hes.v2n3p55)
- Morrison, R. (2011). A comparison of online versus traditional student end-of-course critiques in resident courses. Assessment & Evaluation in Higher Education, 36(6), 627–641.
- Norris, J., & Conn, C. (2005). Investigating strategies for increasing student response rates to online delivered course evaluations. Quarterly Review of Distance Education, 6(1), 13–29.
- Nowell, J. B., Gale, L. R., & Handley, B. (2010). Assessing faculty performance using student evaluations of teaching in an uncontrolled setting. Assessment & Evaluation *in Higher Education, 35*(4), 463-475. (DOI: 10.1080/02602930902862875)

- 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. (DOI:10.1080/02602930701293231)
- Prunty, P. K. (2011). Bolstering student response rates for online evaluation of faculty. *Essays on Teaching Excellence*, 23(1). Retrieved from http://podnetwork.org/publications/teachingexcellence.htm
- Ravelli, B. (2000). Anonymous online teaching assessments: Preliminary findings. Retrieved from http://www.edrs.com/DocLibrary/0201/ED445069.pdf.
- Ravenscroft, M. & Enyeart, C. (2009). *Online student course evaluations. Strategies for increasing student participation rates*. Washington, DC: The Advisory Board Company. Retrieved from htttp://tcuespot.wikispaces.com/file/view/Online+Student +Course+Evaluations+-+Strategies+for+Increasing+Student+Participation+Rates.pdf
- Sánchez-Fernández, J., Muñoz-Leiva, F., Montoro-Ríos, F. J., & Ibáñez-Zapata, J. A. (2010). An analysis of the effect of pre-incentives and post-incentives based on draws on response to web surveys. *Quality & Quantity*, 44(2), 357–373. (DOI: 10.1007/s11135-008-9197-4)
- Sax, L., Gilmartin, S., & Bryant, A. (2003). Assessing response rates and nonresponse bias in web and paper surveys. *Research in Higher Education*, 44(4), 409–432. (DOI: 0.1023/A:1024232915870)
- Sid Nair, C., & Adams, P. (2009). Survey platform: A factor influencing online survey delivery and response rate. *Quality in Higher Education*, 15(3), 291–296.
- Sid Nair, C., Adams, P., & Mertova, P. (2008). Student engagement: The key to improving survey response rates. *Quality in Higher Education*, 14(3), 225–232.
- Sorenson, D. L., & Reiner, C. (2003). Charting the uncharted seas of online student ratings of instruction. In D. L. Sorenson & T. D. Johnson (Eds.), *Online student ratings of instruction* (New Directions for Teaching and Learning, No. 96)(pp. 1–29). San Francisco: Jossey-Bass.
- Stowell, J. R., Addison, W. E., & Smith, J. L. (2012). Comparison of online and classroom-based student evaluations of instruction. *Assessment & Evaluation in Higher Education*, 37(4), 465–473.
- The IDEA Center (2008). Facilitating response rates in IDEA online. Manhattan, KS: The IDEA Center. Retrieved March 5, 2012, from http://www.theideacenter.org/OnlineResponseRates.
- Toepoel, V. (2012). Effects of incentives in surveys. In L. Gideon (Ed.), *Handbook of survey methodology for the social sciences* (pp. 209–223). New York, NY: Springer. (DOI: 10.1007/978-1-4614-3876-2_13)
- Van Selm, M., & Jankowski, N. W. (2006). Conducting online surveys. *Quality & Quantity*, 40(3), 435–456. (DOI: 10.1007/s11135-005-8081-8).