Routledge

# The adequacy of response rates to online and paper surveys: what can be done?

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Despite these variations, there are some common features to online surveying practice. These have been described by (Dommeyer et al. 2004). They reported that: a typical online evaluation involves: giving students assurances that their responses will be de-identified and that aggregate reports will be made available only after the final grades are determined; providing students with the URL to access the survey—generally using their student ID number; students responding numerically to multiple response items and typing answers to open-ended questions; providing students with a receipt verifying that they have completed the evaluation; and providing at least two weeks in which the students can respond, usually near the end of term/semester (612).

## Comparability of online and on-paper survey response-rate data

(McCormack 2003) reported that there are 'new expectations in relation to the evaluation of teaching, for example, expectations about the role of evaluation of teaching in promotion and probation and about the public availability of student evaluation results on institution web sites …' (2). More specifically, the expectations are that teaching evaluations should be used directly, openly and compulsorily in promotion and probation decisions, and that data on student evaluation of courses should be made available publicly to inform the public. Such expectations may be seen as an extension of the change in the focus of teaching and course evaluations from formative to summative (Ballantyne 2003).

These changes in expectations and focus are occurring at the same time that the use of online surveying is increasing. Considered together, this has raised interest in issues around response rates to these surveys. Yet, a recent review of literature regarding instruments for obtaining student feedback (Richardson 2005) claimed that 'little is known about the response rates obtained in electronic surveys, or whether different modes of administration yield similar patterns of results' (406).

Closer scrutiny of the literature, however, reveals that a good deal‹ known. Moreover, there is also a fair amount of information available in relation to the comparison between patterns of results obtained through using different modes of administration of surveys. Some of that literature is reviewed below—with the caveat that while it is strongly suggestive of what one might call a 'prevailing position', it also illustrates substantial variability.

In general, online surveys are much less likely to achieve response rates as high as surveys administered on paper—despite the use of various practices to lift them. Some literature demonstrating this follows and has been summarized in Table 1. In addition, in some cases (such as Griffith University), the reported response rate for paper-based surveys is conservative because an academic may only hand out paper surveys to one sub-group (e.g. one class) of students rather than to all that were enrolled. Given that this practice is not reported centrally, there is no way to take it into account when calculating the overall response rate.

In summary, of the eight examples cited in Table 1, most of the online surveys achieved response rates that were much lower than the paper-based ones (on average, 33% compared with 56% = 23% lower). Thus, in general, these data show that online surveys do not achieve response rates that are even close to what is achieved with paper-based surveys. There are just two exceptions which will be detailed next.

In the research by Watt et al. (2002), the overall response rate for online surveys was 32.6%, while for paper surveys it was 33.3% (333). This finding is inconsistent with the other data reported in Table 1. However, the context for the low on-paper response rate in Watt et al.'s research is that the courses surveyed were all taught in distance education mode. This means that these paper surveys were not handed out in a face-to-face environment as they were in the other studies. This finding raises a question about the impact of face-to-face administration of surveys.

Table 2.    Methods used to boost online survey response rates in five universities.

| University | Methods used | Online survey response rate (%) |
|---|---|---|
| Murdoch University (Ballantyne 2005) | 1, 2 & 3 | 47 |
| Canterbury University (Ogier 2005) | 1 & 3 | 30 |
| Monash University (Nair et al. 2005) | 1 | 31 |
| Griffith University | no measures taken | 20 |
| QUT (Sweep 2006)* | no measures taken | 23 |

*(T. Sweep, pers. comm.)

Methods used in the institutions investigated, together with the response rate achieved for online surveys, are summarized in Table 2. These data suggest that, generally speaking, the greater the number of measures taken to boost online response rates, the higher those rates are.

In addition to the measures specified above, Ballantyne (2005) reported that for each survey at her university the email sent to students contained a URL which allowed them to access the survey more easily. This same URL was also embedded in the course WebCT pages and the course welcome pages. All surveys were also, by default, open for 20 days. Aside from these extensive mechanisms, Ballantyne speculated on the reasons for the relative success at Murdoch University. She noted that Murdoch had been using online surveys since 1998 and that it has had mandatory surveying since 1993. She proposed that this has helped to create a culture in which such surveys were accepted by students and staff.

Neither Griffith University nor QUT used email reminders for online surveys, nor any form of incentive scheme to potential respondents. Academics were simply advised to ensure that they encourage the students to respond. Clearly, given that these institutions achieved the lowest online response rates (20% and 23% respectively) encouragement alone appears to have little effect.

**Additional approaches to boosting response rates**

Two websites offer particularly succinct, credible and partly overlapping advice regarding practices that can boost response rates. These are Zúñiga (2004) from the US Teaching and Learning with Technology/Flashlight Group, and Quinn (2002) from the University of South Australia. Zúñiga offered a set of seven 'best practices for increasing response rates to online surveys'. These are:

(1)    _I_ 🐂 _t_. This basically means making it easy for students to access the survey by, for example, providing them with the survey URL in an email sent directly to them.

(2)    ◄ **c**  ◄  ◄_I_ 🐂 ◄  ◄ c ◄. Zúñiga advocated 'At least three reminders'. Others, however, point to the inevitable diminishing return on this investment coupled with the possibility of irritating the survey population (Kittleson 1995; Cook et al. 2000). In the context of surveying multiple lecturers in any one course, and multiple courses in any one semester, respondents are likely to have several surveys to complete. The potential for a barrage of reminders—and commensurately higher levels of irritation—is evident.

(3)    ◄  c ◄. Zúñiga contended that 'Nothing helps more than regular reminders to students from faculty'. This assertion does not appear to be entirely supported by the literature. As shown earlier in this paper, institutions that did not use direct email reminders to students—implicitly relying on academics to promote participation—achieved much lower response rates than those that did. The combination of direct reminders backed up

response rates. Clearly, the literature and practice reviewed in the first section of this paper show that there is a long way to go before online survey response rates will match those of on-paper. There is an argument that can be made here. The two primary purposes of teaching and course evaluation surveys are for monitoring quality and for improving quality. Hence the actions of academics that relate to Zúñiga's fourth point, ' ', are the most critical—yet also the most difficult—to impact on.

In summary, there are many methods for boosting response rates to online surveys. Many of these would apply equally well to boosting response rates to any kind of survey. At present, few of the methods advocated above are used for on-paper surveys, yet on-paper surveys already achieve relatively high response rates—perhaps because they are administered to a captive audience, often with some dedicated class time sacrificed for the purpose. If classes were conducted in computer laboratories, online surveying done in class could possibly reap similar rewards. This suggestion may therefore be added to the lists offered by Zúñiga (2004) and Quinn (2002). Conversely, if some of the measures above were used with on-paper surveys, their response rates might be even higher than they already are.

## What is an adequate response rate?

It might be strictly more correct at this point to be asking what an adequate sample size is. However, in the context of teaching and course evaluation surveys, sampling is not likely to be in the minds of academics. It is much more likely that they will ask a question about response rates. Furthermore, if a determination is made regarding sample size, the size of the population being sampled needs to be known first and so the corresponding response rate can be readily calculated from these two figures.

Whether or not a response rate is adequate depends (in part) on the use that is being made of the data. If the data gathered from a teaching evaluation survey were to be used only to bring about improvements by that teacher, and there is even one response that provides information which can be used in this way, the survey's purpose has, at least in part, been served and the response rate is technically irrelevant. If such a single useful response were just one from (say) a hundred or more possible respondents, that is of no consequence—unless that response is entirely at odds with what the majority of other students would have said. A more likely outcome would be that a single response would be regarded as completely inadequate in the context of a summative appraisal of the performance of the teacher. Generally, course and teaching evaluation data are used for both of these purposes, and increasingly the latter (Ballantyne 2003).

Accepting that course and teaching evaluations are rarely conducted for solely formative purposes, there is certain to be widespread concern about the adequacy of the responses to these surveys. In part, this will translate into a concern about response rates. It should be noted however, that this concern occurs without sufficient awareness of the importance of sample size and population size.

Richardson (2005) cited Babbie (1973, 165) and Kidder (1981, 150–151) when stating that 50% is regarded as an acceptable response rate in social research postal surveys. Baruch (1999) researched the response rates reported by 141 published studies and 175 surveys in five top management journals published in 1975, 1985 and 1995. He found that the overall average response rate was 55.6%. Richardson (2005), however, indicated that the Australian Vice-Chancellors' Committee & Graduate Careers Council of Australia (2001) regarded 'an overall institutional response rate for the Course Experience Questionnaire (CEQ) of at least 70% [to be] both desirable and achievable' (4). But, in concluding comments, he stated: 'Response rates of 60% or more are both desirable and achievable for students who have satisfactorily

completed their course units of programmes.' (p.409.), despite having noted earlier that this rate 'clearly leaves ample opportunity for sampling bias to affect the results' (406).

Assertions regarding the adequacy or otherwise of a particular percentage response rate appear to be made without reference to any theoretical justification—or to the total number of potential respondents. Behind the assertions appears to be a balance between rational and political considerations of acceptability. It would be better if there was a theoretically justified, systematic

older. The views of these people may deviate systematically from the views expressed by those who attend the daytime lecture.

Sample bias can also be introduced as a product of the survey method that is chosen. Watt et al. (2002, 329) have reported that web users are demographically different from other users. Salmon et al. (2004) reported that variance in data from web surveys was less than for paper surveys. It is reasonable to suppose that an online survey will attract responses from students who are demographically different from students who would respond to a paper survey.

. In practice, if the reader wants to calculate sample size instead, the requirement to survey all the students can be removed.)

If all students enrolled are surveyed, or if a random selection of these are surveyed, random sampling is still not achieved in practice because those who respond are not a random selection. Indeed, those who respond are systematically different from those who do not, and that those who

advocated by Table 3 are generally accepted. Despite this a high weight is simultaneously placed on student evaluation results.

## Conclusion

This article has confirmed earlier research (Cook et al. 2000) which showed that response rates to online surveys of teaching and courses are nearly always very much lower than those obtained when using on-paper surveys. While a wide range of methods exists for boosting response rates, institutions do not make full use of these. The methods that are used are more likely to be applied to boosting response rates to online surveys than on-paper surveys. This is despite the fact that this article has shown that in many cases the response rates obtained for course and teaching evaluation surveys are not adequate regardless of the method of surveying used.

Given the anonymity of responses and the impossibility of using demographic data to predict attitudinal variables in students (and therefore there being no viable way to systematically target surveys at a minimal sample of students that would be representative of the whole group), appropriate paths of action that remain are to:

(1) use multiple methods to boost survey response rates as high as possible (regardless of whether on-paper or online surveys are used—but *o ‹ ‹‹* when online surveys are used);
(2) consider the probable effect that use of a particular survey design and method might have on the make-up of the respondents and take this into account when interpreting the feedback obtained;
(3) use multiple methods of evaluation to elucidate findings—so as to construct a better informed understanding of what the true picture is.

Without these actions being taken, relying heavily on student evaluations of courses and teaching is likely to be, at best, inadequate, at worst, misleading.

## Notes on contributor

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