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"We thought it might encourage participation."  
Using lottery incentives to improve  
LibQUAL+(TM) response rates among students

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“We thought it might encourage participation.” Using lottery incentives to improve LibQUAL+™ response rates among students

## **Abstract**

Libraries deploying the LibQUAL+™ survey can offer a lottery incentive and many do in the hope of increasing response rates. Other libraries may be prohibited from offering one because of Institutional Review Board restrictions, as is the case at [institution name]. We wanted to discover why libraries offer lottery incentives and what kinds and if they believe these incentives have a positive impact on their response rates. The responding libraries hold a general belief that lottery incentives are effective but base this on feeling rather than research. We examine what the literature says about lottery incentives and student populations.

## **Introduction**

*“Our incentive prize was an iPad and it generated a great deal of excitement around campus. The iPad was highlighted in the subject line of the targeted emails.” – Survey Respondent*

It is a decision that every administrator who conducts LibQUAL+™ needs to make: Will a prize be offered for completing the survey? We asked this question in the Fall of 2010 as [institution name] got ready to administer the survey in the Winter of 2011. Although we originally planned to offer a lottery incentive, we had to abandon this idea when we discovered our university’s Institutional Review Board (IRB) office had implemented a new rule forbidding the use of lottery incentives in March of 2010.<sup>1</sup> Our assumption, like that of many researchers on our campus, has always been that lottery incentives would increase our response rates yet the research provided by the IRB office indicated otherwise. Our frustration with this new rule, a low response rate after administering LibQUAL+™ coupled with the research cited by the IRB office led us to question the assumption we had that lottery incentives help increase response rates. This article will provide an overview of the literature on incentives, discuss what is known about the impact of prepaid and postpaid incentives on response rate, and present the opinions of 2010 LibQUAL+™ administrators about the effectiveness of postpaid lottery incentives.

## **Background**

As part of ongoing assessment efforts [institution name] decided to implement LibQUAL+™ in 2011. LibQUAL+™ is “a suite of services that libraries use to solicit, track, understand, and act upon user’s opinions of service quality.”<sup>2</sup> The LibQUAL+™ survey was

developed by Fred Heath, Colleen Cook and Bruce Thompson at Texas A&M University along with the Association of Research Libraries (ARL). Approximately 200 libraries around the world implement LibQUAL+™ each year. The LibQUAL+™ survey instrument can be administered in long form, 22 core survey items, or short (LibQUAL+™ Lite) form which requires individual users to respond to a randomly selected subset of the 22 core survey items while still gathering data about all 22 LibQUAL+™ items. The survey also records demographic information about the participant. One of the decisions a survey administrator has to make when setting up the LibQUAL+™ survey is whether to offer a lottery incentive, an option which can be turned on or off within the survey software. When this option is implemented respondents may enter their email address at the end of the LibQUAL+™ survey for a chance to win a prize.

## **Literature Review**

A substantial portion of the literature on survey methodology is focused on improving survey response rates, which have been on the decline.<sup>3</sup> One popular method for improving response rates is the use of incentives. Although the literature covers both mail and web-based survey administration and incentives, LibQUAL+™ is an online survey, and we will focus our literature review on the topic of incentives used with web-based surveys and their effectiveness.

### *Prepaid Incentives*

There are two primary forms of incentives that have found favor with survey researchers. The first is prepaid incentives that are usually paid to all potential participants, regardless if the participant completes the survey. The amounts are generally small and include cash ranging from \$1 to \$5 or small gift items such pens or notepads.<sup>4</sup> Pre-paid incentives are frequently used in mail based surveys but administering prepaid incentives for online surveys can present a

challenge as cash cannot be emailed to the potential respondents.<sup>5</sup> One possible method includes using web-based services such as PayPal.com to transfer money to people online.<sup>6</sup>

### *Postpaid Incentives*

Postpaid incentives may be monetary or nonmonetary and are either paid to every participant upon completion of the survey or the participants are entered into a lottery drawing for a larger prize or significant cash award. Postpaid incentives offered to all participants are by necessity small amounts or gifts similar to prepaid incentives.<sup>7</sup> Postpaid lottery incentives are frequently used in online surveys because of the difficulties web-based surveys present in providing pre-incentives.<sup>8</sup> Lottery incentives in web-based surveys generally fall in the range of \$15 to \$350 and often take the form of gift certificates, rather than cash.<sup>9</sup> Some studies have offered non-cash prizes, such as iPods, iPads, or DVD players.<sup>10</sup>

### *Effectiveness of lottery incentives*

Pre-incentives are generally considered the most effective form of incentive for web-based surveys but are not as common in web-based surveys where lottery incentives are more popular.<sup>11</sup> The results of studies on the impact of lottery incentives on response rates for web-based surveys have produced conflicting results.<sup>12</sup> Early studies on web-based surveys have used data from research on mail surveys and attempted to apply the results to web-based surveys, yet there is evidence that what works in a mail survey is not generalizable to online surveys.<sup>13</sup> Heerwegh concluded that unlike mail surveys, web survey response rates apparently benefit from lotteries in a relatively consistent way.<sup>14</sup> Similarly, Deutskens, de Ruyter, Wetzels, and Oosterveld state that “lotteries are probably the most effective reward in an online environment as they lead to the highest response rate in the short version and still a respectable response rate in the long version.”<sup>15</sup> A 2003 study found prepaid incentives on a web-based survey did not

increase response rates, while a postpaid lottery incentive did increase completion rates.<sup>16</sup> Other researchers have not found lottery incentives to be particularly effective in increasing response rates in web-based surveys.<sup>17</sup> Cook, Heath, and Thompson reported in a meta-analysis of surveys that incentives could even potentially suppress response rates.<sup>18</sup>

### *Incentives and College Students*

The literature on the impact of lottery incentives on higher education students' willingness to respond to a survey is quite limited. The only research to date on the impact of lottery incentives on web-based surveys taken by college students in the United States is Laguilles, Williams, and Saunders. In this study, a random sample of college students was divided into five groups with four different surveys and a control group. The authors experimented with different amounts for lottery incentives, including ten \$50 gift certificates to the dining hall, two iPod Nanos and an iPod Touch. They found lottery incentives had a positive impact on all four surveys.<sup>19</sup>

Other studies on the effect of incentives on students are Heerwegh who surveyed over 2,000 Belgian students enrolled in a "full-time first year curriculum" and Sánchez-Fernández et al. who surveyed over 1,600 undergraduate students at a Spanish university.<sup>20</sup> Heerwegh offered 10 gift certificates if 25€ each and found evidence that a lottery incentives has an "overall positive effect on the response rate of the web survey."<sup>21</sup> Sánchez-Fernández et al. offered fuel or transportation coupons as a pre-incentives and lottery incentives ranging in value from 120€ to 350€ but did not find that lottery incentives improved response rates.<sup>22</sup>

Despite the inconclusive nature of the evidence about lottery incentives and their effect on web surveys, lottery incentives remain popular among researchers using web-based surveys

particularly in higher education where all students have email addresses and check them regularly.<sup>23</sup>

### **Methodology**

We developed the LibQUAL+™ Incentives Survey to find out why LibQUAL+™ administrators do or do not offer incentives, what types of incentives are offered, and their perceptions of the effectiveness of lottery incentives on response rates for the LibQUAL+™ survey.

We developed a 25-item questionnaire and deployed it using Qualtrics survey software. The survey was administered to all 124 US and Canadian (English language only) academic libraries (excluding community colleges) that participated in LibQUAL+™ in 2010. An email invitation along with a link to the survey was sent directly to LibQUAL+™ survey administrators on May 16, 2011 with one reminder email sent one week later and a second sent after four weeks; the survey was open for six weeks. The contact information for survey administrators was obtained from the Association of Research Libraries (ARL).

Data from the 124 institutions was obtained through the LibQUAL+™ data repository and included: institution name, response rate broken down by population potential respondent pool size, and survey (LibQUAL+™ Lite or LibQUAL+™) used. This data was then merged with the Incentives Survey responses using Qualtrics.

### **Results**

Twenty-nine of the 124 LibQUAL+™ 2010 survey administrators completed the Incentives Survey, a return-rate of 31%. Because of the small population and response rate, the close-ended questions' results should be viewed with some caution as the sample cannot be



generalized to all LibQUAL+™ participants. However, the answers to open-ended questions provide insight and those results are discussed throughout this section.

All of the responding libraries were 4-year institutions; 22 U.S. libraries and 7 Canadian libraries completed the survey. Of the institutions in the United States, 9 were private and 13 were public. All of the responding Canadian libraries were public institutions. The responding institutions ranged from small to large based on the Carnegie classification, as seen in Table 1.

**Table 1: Size and Type of Responding Institutions**

<b>Carnegie Classification</b>	<b>Size</b>	<b>Private</b>	<b>Public</b>	<b>Completed</b>
Very small	<1,000			0
Small	1,000-2,999	2	0	2
Medium	3,000-9,999	5	6	11
Large	10,000+	2	8	10
Canadian	10,000+		6	6
				n=29

LibQUAL+™ response rates for the institutions are reported in Appendix A. Libraries can offer the long version, lite version or a combination of both. Most of the responding institutions administered the Lite version of LibQUAL+™ as illustrated in Table 2.

**Table 2: Long, Lite or Combination**

<b>Version</b>	<b>Completed</b>
100% long	7
100% lite	18
50% long/50% lite	1
80% long/20% lite	2
25% long/75% lite	1
n=29	

When an institution prepares to deploy the LibQUAL+™ survey, survey administrators have the option to offer a postpaid lottery incentive; there is no option that allows a survey

administrator to easily offer prepaid or postpaid incentive to *all* participants, although there is nothing to prevent a library from doing this outside of the LibQUAL+™ software. Twenty-six respondents to the Incentives Survey offered a postpaid lottery and one institution offered a postpaid incentive to all participations. Two institutions did not offer an incentive.

Incentives Survey respondents were asked to indicate what types of advertising they did for the LibQUAL+™ survey and were given ten close-ended options and one open-ended “other” choice. The majority advertised via an email announcement, the library’s homepage, posters, and/or flyers/handouts (Table 3).

**Table 3: Type of Advertising**

Answer	Response	%
Email (announcing the coming survey)	28	97%
Library home page	26	90%
Posters	18	62%
Flyers/handouts	17	59%
Other	11	38%
Ad in school newspaper	9	31%
Department visits	5	17%
Library newsletter	4	14%
Banner	2	7%
None	0	0%
		n=28

Administrators also listed many “other” forms of advertising including social media, table tents, a press release, library public computers, faculty department newsletter, bookmarks, and faculty and administrator meetings. A few viewed the incentive as a “marketing tool,” in the hopes that it would increase response rates but also to “generate awareness about the survey” as well as the library. They recognized that marketing the survey was an important factor in improving response rates.

An open-ended question asked participants to explain why they offered an incentive; we then grouped the responses by themes. The most common theme was an attempt to increase response rates (Table 4). Administrators of LibQUAL+™ used terms and phrases such as “hoped”, “had heard that you have a better chance,” “an assumption”, and “thought it might encourage participation.” Several Incentives Survey respondents referred back to previous years in their explanations for offering postpaid lottery incentives and mentioned response rates had been poor and/or were declining and they expressed hope that an incentive might increase response rates. One respondent commented on participant expectations, “. . .it has become common practice and appears to be expected by the students.” Only one of the respondents indicated they offered an incentive based on research, in this case a consultation with a social scientist on campus.

**Table 4: Reasons for offering an incentive (lottery or post-paid)**

<b>Reason</b>	<b>Responses</b>
To improve participation	17
Improve undergrad response rate	4
Marketing	4
Precedent (other departments do it)	4
Past experience	3
Improve faculty participation	1
Student expectation that a prize will be offered	1
n=27	

Includes respondents who did and did not offer incentives in 2012 but offered in the past.

Another decision the survey administrator has to make when deploying LibQUAL+™ is the amount to spend on the lottery incentive. Total amounts spent per institution on incentives ranged from \$50 all the way to \$850. The one responding institution who offered a post-paid incentive given to all participants who completed the survey spent \$5,500. Most institutions offered more than one lottery incentive and they included such things as cameras, iPads, iPods,

and digital cameras (Table 5). Gift cards were the most commonly used incentives by LibQUAL+™ administrators.

**Table 5: Lottery Incentives Offered**

Incentive	Details	Amount(s)
Gift cards	<ul style="list-style-type: none"> <li>• Best Buy</li> <li>• Starbucks</li> <li>• University Bookstore</li> <li>• Barnes and Noble</li> <li>• iTunes</li> <li>• Restaurants</li> <li>• Target</li> <li>• Visa/American Express</li> </ul>	<ul style="list-style-type: none"> <li>• \$5</li> <li>• \$10</li> <li>• \$25</li> <li>• \$50</li> <li>• \$100</li> <li>• \$250</li> </ul>
iPods	<ul style="list-style-type: none"> <li>• Touch</li> <li>• Shuffle</li> </ul>	\$50-\$199
eReaders	<ul style="list-style-type: none"> <li>• Amazon Kindle</li> <li>• Barnes and Noble Nook</li> </ul>	\$79-\$199
Wii	<ul style="list-style-type: none"> <li>• Sports bundle</li> </ul>	\$150-\$200
Digital Cameras	<ul style="list-style-type: none"> <li>• 12.1MP digital camera</li> <li>• Coolpix</li> <li>• Flip video camera</li> </ul>	\$80-\$150
iPad		\$500
TV	<ul style="list-style-type: none"> <li>• 32" HDTV</li> </ul>	\$250-\$300
GPS	<ul style="list-style-type: none"> <li>• TomTom</li> </ul>	\$100
Tote bags		
		n=27

Responding institutions who offered an incentive

When asked if they thought the incentives made a difference in their LibQUAL+™ response rate, 16 said yes, four said no, and seven said they were not sure. One of the administrators stated, "...it's human nature to be attracted to a prize drawing" while another responded, "students kept calling the library to ask when the prize winner(s) would be announced. It created a lot of buzz on campus." Several administrators also referred to the incentive as a "carrot" that could entice students to fill out the LibQUAL+™ long survey.

When asked if they would offer an incentive in future administrations of LibQUAL+™, 23 Incentives Survey respondents said yes, one said no, and three said they were not sure. Respondents who stated they had a high response rate in the past were more inclined to offer

incentives again. A cross tabulation of this question and the question, “Do you think the incentive(s) made a difference in your response rate?” showed that two of the respondents who said incentives did not make a difference in their response rate plan on offering an incentive in the future and the other two respondents who said incentives did not make a difference in their response rate said they were not sure they would offer an incentive in the future (Table 6). The only respondent who does not plan to offer an incentive in the future indicated their incentive made a difference in their 2010 response rate.

**Table 6: Impact of Incentives on Response Rate  
and Plans to Offer Incentives in the Future**

		Do you think the incentive(s) made a difference in your response rate?			Total
		Yes	No	Not sure	
Would you offer incentives (again) in the future?	Yes	15	2	6	23
	No	1	0	0	1
	Not sure	0	2	1	3
Total		16	4	7	27

For those respondents who said they will continue to offer incentives in the future one of the primary motivators is to improve response rates (Table 7). One participant wrote, “There is nothing like a good picture of a happy prize winner to draw attention to the announcement and further information.”

**Table 7: Reasons for continuing to offer incentives**

Category	Responses
Marketing/PR	9
To Improve participation in the future	5
Past experience	5
Students like incentives	3
Students expect incentives	3
Precedent (library or other departments offering surveys)	5
Return on investment/goodwill	5

n=22

Administrators felt that once an incentive had been offered this set a precedent and it was important to continue offering incentives in the future to get the same or higher levels of participation. For some administrators this precedent was based on previous LibQUAL+™ surveys but for other administrators it was because other surveys on campus offered an incentive so the library felt the need to follow suit to achieve an acceptable response rate.

Only one respondent does not intend to offer incentives in the future, "...the process for offering and awarding incentives is too cumbersome and complicated to be worth the small increase in number of respondents."

#### *Response rates*

Nineteen institutions reported their recruitment sample size allowing us to calculate their response rate. Response rates to the LibQUAL+™ survey reported by the Incentive Survey participants ranged from 4% to 55% with an average of 15%. Institutions offered lite, long or a combination of the two. The majority offered the lite version.

**Table 8: Average response rates by survey type**

Type	Institutions	Average response rate
Lite	13	17%
Long	3	10%
Mix	3	12%
		n=19

Eighteen of these institutions offered lottery incentives. One institution offered a postpaid cash incentive to all participants who completed the survey. Those institutions that offered a

lottery incentive had a 13% average response rate. The one institution that offered a post-paid incentive to all their participants had a 55% response rate.

Institutions that offered combinations of prizes (gift cards and items) had a higher response rate than those who offered only one or the other. They also spent significantly more money on their prizes.

**Table 9: Type of lottery post-incentive offered**

Type	Reporting institutions	Average Amount	Average response rate
Item(s) only	6	\$429	12%
Gift cards	10	\$285	12%
Combo	2	\$750	37%
			n=18

Responding institutions who provided a response rate and offered incentives

Five institutions offered a single item and thirteen institutions offered multiple prizes increasing the chances of winning a prize. Institutions with multiple items had a higher response rate than those who offered only a single item but also spent more on average.

**Table 10: Chance of winning**

Type	Reporting institutions	Average Amount	Average response rate
Multiple	13	\$467	14%
Single	5	\$170	10%
			n=18

Responding institutions who provided a response rate and offered incentives

## Discussion

The respondents to our Incentives Survey clearly felt that postpaid incentives can improve response rates. This is not uncommon among survey administrators. Porter and Whitcomb found in their survey of institutional researchers that the majority (75%) of their respondents perceived lottery incentives increased response rate.<sup>24</sup> The respondents to the

Incentives Survey associated past incentives with high response rates; however, it's important to point out that correlation does not necessarily mean causation. One administrator responded, "People seem to be attracted to something free. However, we have no empirical proof to this effect."

When financial times are tight, we must look to the research about incentives in our attempt to improve response rates. There are many variables that impact an individual's decision to participate outside of incentives. Variables can include the salience of survey topic to an individual, personalization of the recruitment email or letter and follow-up communication, and immediacy, which includes instant or timely notification of the prize winner. The population is another important variable and in the case of college or university students one that has not been studied extensively.

#### *Amount and types of incentives*

Survey administrators may rightly ask how much they should spend on lottery incentives to get the desired response rate. As response rates are getting lower there appears to be a tendency to believe incentives will increase response rate. With the competition for student responses (input) there is a belief that bigger and bigger prizes are needed to provide an incentive for students to respond to a survey. This may be raising expectation among students with a consequence of having to offer larger and larger incentives and receiving lower response rates. How much may not be as important as the chances of winning a prize.

One of the administrators of LibQUAL+™ observed:

We have offered bigger incentives in the past (five iPod Shuffles were given away in a lottery in 2007) with significant improvements in participation rate. In 2010 we needed to be careful with our pennies, so we consulted a social scientist on campus, who indicated



that numerous smaller incentives might be even more successful (participants either intentionally or unintentionally [calculate] the odds, and with 12 prizes the odds aren't bad). We had even greater participation in 2010, although we also had "laptop stations" in non-library locations that helped.

The literature about survey incentives corroborates what the quote above illustrates—a bigger prize does not necessarily mean better response rates.<sup>25</sup> Porter and Whitcomb explain that Small amounts may have little impact because the respondent does not feel they adequately justify his or her expenditure of time. Large amounts, however, may have little impact because respondents are skeptical they will receive the prize given the large value.<sup>26</sup>

In addition, significant improvement in response rates has been found with relatively small differences in lottery offerings. For example, Downes-LeGuin et al. found improvement at the \$15 level but not at the \$25 level.<sup>27</sup> Therefore, rather than offering large lottery incentives, evidence shows multiple, smaller awards, such as \$15 gift certificates, may lead to higher response rates.

The Incentives Survey results tell a slightly different story but the response rate is too small to be generalizable. While the survey results do indicate that a combination of items, such as gift card/cash/prizes appears to be more effective in raising response rates, these institutions also spent more on average. The indication here is that larger prize amount may indeed be effective to raise response rates amongst student populations. It is possible that the prizes, which were frequently the latest technology gadgets, are more appealing to students than to the general population. Laguilles et al. offered 10 gift cards worth \$50 each to the colleges dining services

and iPods (Nano and Touch) to the students participating in their survey.<sup>28</sup> Their results do not indicate any significant difference in the response rates between the two types of incentives but they were testing survey salience in combination with incentive type. Heerwegh surveyed Belgian students and offered multiple small prizes but not one large prize.<sup>29</sup>

To make a decision about the size or type of a lottery offering, researchers need a better understanding of the population and the influence of incentives in higher education settings. Much of the research is on non-student populations. College or university students appear to present some different behaviors when it comes to lottery incentives and surveys in general. Several researchers have concluded that what applies to other populations may not apply to students, but additional research is needed.<sup>30</sup> College students who are paying tuition and have other financial obligations may find the larger prize items attractive.<sup>31</sup> Our research also indicates that there may indeed be some unique characteristics to this population that impacts what kind of incentive a library uses. Different incentives types may appeal to different populations and even genders.<sup>32</sup> One of the Incentives Survey participants reported offering three relatively expensive items: a 32" HDTV, a 32GB iPod Touch, and a 12.1MP digital camera. The respondent explained, "I let random students 'vote' on which incentives would attract them to take the survey and these are the 3 prizes they selected." As noted survey researchers Dillman, Smyth, and Christian advise, "It is important for appeals to respondents to be broadly based in an attempt to encourage all types of survey recipients to respond."<sup>33</sup>

### *Marketing*

Incentives are only one piece of the puzzle to improving response rates. The salience of the survey topic is an important factor in an individual's decision to respond to a survey.<sup>34</sup> How salient a survey about the library is to the target population will depend on the individual.

Library administrators will want to hear from both users and non-users and need to make sure to market to both. Many of the Incentives Survey respondents referred to their marketing as a significant strategy to increase response rates. Libraries should consider how to market their survey to address relevancy to the individual student.

Kypri notes that careful planning of the implementation process of the survey is possibly more important than the value of the incentive given.<sup>35</sup> A 2011 discussion on the LibQUAL+ listserv points to the value of marketing and follow-up. Several people who posted stated that while the incentive (iPads, Flip camera, iPod touches) were helpful in advertising the survey, frequent emails and a well-planned advertising campaign were also effective if not more effective methods of raising the response rate than other methods.

#### *Future research*

There is still a great deal that we do not know about the impact of lottery incentives on web-based survey results, but there is research that indicates lottery incentives are effective among student populations.<sup>36</sup> This is an area that warrants further exploration considering that surveys are “one of the primary data sources of research in higher education.”<sup>37</sup> Another method that has successfully increased response rates in other online surveys is small prepaid incentives.<sup>38</sup> The type of incentive (pre vs. post) and its impact of college student response rates should be studied. Given that the one institution in the Incentives Survey that offered post-paid incentives to all participants achieved a 55% response rate indicates that a token given to all participants may be effective among college students as well. ARL and LibQUAL+™ could investigate the possibility of a trial of using pre-incentives and compare response rates to those institutions offering post-incentives.

The respondents to the Incentive Survey also offered prizes such as iPods and large screen televisions. While the current research suggests smaller prizes are more effective, some researchers point out that the effectiveness of the incentive depends in large part on its attractiveness to the potential audience.<sup>39</sup> Single large prize items with fewer chances of winning are thought to be less effective than multiple smaller prizes with a higher chance of winning. However, student populations may be drawn to the larger, flashier prize. Additional research on the appeal of prize items vs. cash on students is necessary.

It can be difficult to do research on college students given that student response rates vary widely across universities, even with standardized surveys.<sup>40</sup> Even when studying lottery incentives on a single campus, there can be issues since students would be divided into groups of those who do and do not have the opportunity to participate in a lottery. Campuses are a small community and it would be easy for students from the control group to discover that other students are eligible for a prize.<sup>41</sup> Several institutions working together may be able to shed some light about students and lottery incentives, although that too poses some challenges. It can, however, shed light on the types of incentives that students find appealing with the understanding that the student population and institutional characteristics can strongly affect response rates.<sup>42</sup>

The current iteration of LibQUAL+™ only has a lottery incentive option in place. In the future, we suggest ARL use LibQUAL+™ to test prepaid incentives and multiple small lottery incentives. This could be accomplished by asking for administrators to volunteer their schools and standardize all marketing and promotional materials between the volunteers.

## **Conclusion**

LibQUAL+™ is an important research tool used by many academic libraries throughout the world. Libraries use LibQUAL+™ to make important service and policy decisions. As LibQUAL+™ administrators consider how to achieve an acceptable response rate, the question of the effectiveness of incentives will continue to be debated. The research shows that fewer, smaller prizes may be an effective means to increase response rates, but if this holds true for student populations is not yet clear. Larger prizes may prove more effective given the nature of the population but the research is limited in this area. An effective measure may be to do as one of the participants did which is poll the student population to see which prize(s) may be most interesting to them. Some prizes may be more appealing to women as compared to men or to students in a specific major. If the engineering students are the least responsive, is there a lottery incentive that will appeal to them? Finding out what it is that motivates students to participate is a key step in a successful LibQUAL+™ survey.

**Appendix A. Institutional response rates to LibQUAL+™ 2010 and incentives****Table A1: Institutions offering items only**

<b>Response rate</b>	<b>Prize</b>	<b>Chances of winning</b>	<b>Amount spent</b>
13%	ipod touch	Single	\$300
4%	iPod Shuffle	Single	\$100
<b>Average 9%</b>			
26%	We had a drawing for three gifts: a 32" HDV, a 32GB iPod Touch, and a 12.1MP digital camera. I let random students "vote" on which incentives would attract them to take the survey and these are the 3 prizes they selected.	Multiple	\$826.00
16%	Lottery for an iPod Touch and a Wii	Multiple	\$350
11%	three ipod touch	Multiple	\$600
4%	iPod shuffles	Multiple	\$400
<b>Average 14%</b>			
			n=6

**Table A2: Institutions offering gift cards only**

<b>Response rate</b>	<b>Prize</b>	<b>Chances of winning</b>	<b>Amount spent</b>
13%	One \$50 gift card for the university bookstore was offered to undergraduates.	Single	\$50
12%	Gift--chance to win a \$50 gift card	Single	\$100
7%	\$25.00 gift cards from the College Bookstore/ American Express gift card.	Single	\$300
<b>Average 11%</b>			<b>\$150</b>
21%	\$250 gift certificate to either the Bookstore of Computer Store. One for undergraduates and one for graduate students. For each group also gave 5 \$10 Starbucks gift card.	Multiple	\$600
16%	\$50 Barnes & Noble gift card (five)	Multiple	\$250
14%	Best Buy Gift Certificate / University Bookstore Gift Certificate / University Bookstore Gift Certificate / gas card / gas card	Multiple	\$200
14%	Twelve incentive prizes were awarded: one \$100 iTunes gift card, one \$50 Barnes & Noble gift card, and ten Campus Dining Dollars gift certificates.	Multiple	\$250
13%	gift cards to Best Buy, Starbucks and the university bookstore	Multiple	\$400
9%	As an incentive to participate the participants who complete the survey were offered the chance to win one of four (4) gift certificates to the Barnes and Noble Bookstore in the amount of \$25 each or one (1) grand prize Barnes and Noble gift certificate worth \$100.	Multiple	\$200
6%	gift certificates to bookstore, computer store, and coffee shops	Multiple	\$500
<b>Average 13%</b>			<b>\$343</b>
			n=10

**Table 9c: Institutions offering a combination of gift cards/items**

<b>Response rate</b>	<b>Prize</b>	<b>Chances of winning</b>	<b>Amount spent</b>
30%	In addition to the iPod shuffle, we offered 8 x \$25 gift cards for the recipients' choice of any of the following: Library Copycard, Campus Bookstore, Food Services, Best Buy, Cineplex, Starbucks	Multiple	\$300
7%	We offered 6 Nooks and 6 gift cards to the book store.	Multiple	\$1,200
<b>Average 18%</b>			<b>\$750</b>
			n=2

## Notes and References

1. [Institution name], Research Office, Office of Research Integrity, “Raffles and Lotteries as Compensation.” Retrieved from URL (accessed February 1, 2012).
2. Association of Research Libraries, “General Information: What is LibQual™?” Retrieved from [http://www.LibQUAL.org/about/about\\_lq/general\\_info](http://www.LibQUAL.org/about/about_lq/general_info) (accessed February 1, 2012).
3. Association for Institutional Research, “The Big Payoff: Use of Incentives to Enhance Participation in Web Surveys,” *IR Applications: Using Advanced Tools, Techniques and Methodologies*, 25 (2010): 1-10; Jacquelyn Burkell, “Dilemma of Survey Nonresponse,” *Library & Information Science Research* 25, no. 3 (2003): 239-263; Dirk Heerwegh, “An Investigation of the Effect of Lotteries on Web Survey Response Rates,” *Field Methods* 18, no. 2 (2006): 205-220; Juan Sánchez-Fernández, Francisco Muñoz-Leiva and Francisco Javier Montoro-Ríos, “Improving Retention Rate and Response Quality in Web-based Surveys,” *Computers in Human Behavior* 28, no. 2 (2012): 507-514.
4. Stephen R. Porter and Michael E. Whitcomb, “The Impact of Lottery Incentives on Student Survey Response Rates,” *Research in Higher Education* 44, no. 4 (2003): 389-407.
5. Don A. Dillman, Jolene D. Smyth and Leah Melani Christian, *Internet, Mail and Mixed-Mode Surveys: The Tailored Design Method*, 3rd ed. (Hoboken, NJ: Wiley & Sons, 2009), 274.
6. Michael Bosnjak and Tracey L. Tuten, “Prepaid and Promised Incentives in Web Surveys: An Experiment,” *Social Science Computer Review* 21, no. 2 (2003): 208-217.



7. Jerold S Laguilles, Elizabeth A Williams and Daniel B Saunders, “Can Lottery Incentives Boost Web Survey Response Rates? Findings from Four Experiments,” *Research in Higher Education* 53, no. 5 (2011): 537-553; Porter and Whitcomb, “The Impact of Lottery Incentives,” 390.
8. Bosnjak and Tuten, “Prepaid and Promised Incentives,” 209; Porter and Whitcomb, “The Impact of Lottery Incentives,” 390; Laguilles, Williams and Saunders, “Can Lottery Incentives Boost?” 541.
9. Theo Downes-LeGuin, Paul Janowitz, Rob Stone and Shahrokh Khorram, “Use of Pre-incentives in an Internet Survey,” *IMRO's Journal of Online Research* (2002): 1-7; Bernd Marcus, Michael Bosnjak, Steffen Linder, Stanislav Pilischenko and Astrid Schütz, “Compensating for Low Topic Interest and Long Surveys: A Field Experiment on Nonresponse in Web Surveys,” *Social Science Computer Review* 25, no. 3 (2007): 372-383; Juan Sánchez-Fernández, Francisco Muñoz-Leiva, Francisco J. Montoro-Ríos and José Ángel Ibáñez-Zapata, “An Analysis of the Effect of Pre-Incentives and Post-Incentives Based on Draws on Response to Web Surveys,” *Quality & Quantity* 44, no. 2 (2010): 357-373; Tracy L. Tuten, Mirta Galesic and Michael Bosnjak, “Effects of Immediate Versus Delayed Notification of Prize Draw Results on Response Behavior in Web Surveys: An Experiment,” *Social Science Computer Review* 22, no. 3 (2004): 377-381.
10. Elizabeth Deutskens, Ko de Ruyter, Martin Wetzels and Paul Oosterveld, “Response Rate and Response Quality of Internet-Based surveys: An Experimental study,” *Marketing Letters* 15, no. 1 (2004): 21-36; Sánchez-Fernández, Muñoz-Leiva and Montoro-Ríos, “Improving Retention Rate and Response Quality,” 507-514.

11. Dillman, Smyth and Christian, *Internet, Mail and Mixed-Mode Surveys*, 274; Downes-LeGuin et al., “Use of Pre-incentives,” 3.
12. Association for Institutional Research, “The Big Payoff,” 2; Downes-LeGuin et al., “Use of Pre-incentives,” 3; Heerwegh, “Investigation of the Effect of Lotteries,” 206; Marcus et al., “Compensating for Low Topic Interest,” 373; Tuten, Galesic and Bosnjak., “Effects of Immediate Versus Delayed,” 378.
13. Deutskens et al., “Response Rate and Response Quality,” 21; Anja S. Göritz, “Incentives in Web Studies: Methodological Issues and a Review,” *International Journal of Internet Science* 1, no. 1 (2006): 58-70; Heerwegh, “Investigation of the Effect of Lotteries”, 206; Sánchez-Fernández, et al., “Analysis of the Effect of Pre-Incentives and Post-Incentives,” 258.
14. Heerwegh, “Investigation of the Effect of Lotteries”, 215.
15. Deutskens et al., “Response Rate and Response Quality,” 32.
16. Bosnjak and Tuten, “Prepaid and Promised Incentives,” 215.
17. Cihan Cobunaglu and Nesrin Cobunaglu, “The Effect of Incentives in Web Surveys: Application and Ethical Considerations,” *International Journal of Market Research* 45, no. 4 (2003): 475-488; Göritz, “Incentives in Web Studies,” 60; Kevin M. O’Neil and Steven D. Penrod, “Methodological Variables in Web-based Research that May Affect Results: Sample Type, Monetary Incentives, and Personal Information,” *Behavior and Research Methods* 33 no.2 (2001): 226-233; Porter and Whitcomb, “The Impact of Lottery Incentives,” 399-400; Sánchez-Fernández, et al., “Analysis of the Effect of Pre-Incentives and Post-Incentives ,” 371.

18. Colleen Cook, Fred Heath and Russel L. Thompson, “A Meta-Analysis of Response Rates in Web- or Internet-Based Surveys,” *Educational and Psychological Measurement*, 60 no. 6 (2000): 821-836.
19. Laguilles, Williams and Saunders, “Can Lottery Incentives Boost?” 548.
20. Heerwegh, “Investigation of the Effect of Lotteries,” 210; Sánchez-Fernández, et al., “Analysis of the Effect of Pre-Incentives and Post-Incentives,” 364.
21. Heerwegh, “Investigation of the Effect of Lotteries,” 215.
22. Sánchez-Fernández, et al., “Analysis of the Effect of Pre-Incentives and Post-Incentives,” 366.
23. Association for Institutional Research, “The Big Payoff,” 4-5; Porter and Whitcomb, “The Impact of Lottery Incentives,” 390;
24. Porter and Whitcomb, “The Impact of Lottery Incentives,” 395-396.
25. Deutskens et al., “Response Rate and Response Quality,” 31; Göritz, “Incentives in Web Studies,” 69; Heerwegh, “Investigation of the Effect of Lotteries,” 210; Porter and Whitcomb, “The Impact of Lottery Incentives,” 403.
26. Porter and Whitcomb, “The Impact of Lottery Incentives,” 398.
27. Downes-LeGuin et al., “Use of Pre-incentives,” 6.
28. Laguilles, Williams and Saunders, “Can Lottery Incentives Boost?” 547.
29. Heerwegh, “Investigation of the Effect of Lotteries,” 211.
30. Laguilles, Williams and Saunders, “Can Lottery Incentives Boost?” 543.; Porter and Whitcomb, “The Impact of Lottery Incentives,” 404.
31. Porter and Whitcomb, “The Impact of Lottery Incentives,” 403-404
32. Laguilles, Williams and Saunders, “Can Lottery Incentives Boost?” 550.

33. Dillman, Smyth and Christian, *Internet, Mail and Mixed-Mode Surveys*, 21.
34. Laguilles, Williams and Saunders, "Can Lottery Incentives Boost?" 549.
35. Kypros Kypri, Stephen J. Gallagher and Martine L. Cashell-Smith, "An Internet-Based Survey Method for College Student Drinking Research," *Drug and Alcohol Dependence* 76, no. 1 (2004): 45-53.
36. Heerwegh, "Investigation of the Effect of Lotteries," 216; Laguilles, Williams and Saunders, "Can Lottery Incentives Boost?" 550-551.
37. Stephen R. Porter and Paul D. Umbach, "Student Survey Response Rates across Institutions: Why Do They Vary?" *Research in Higher Education* 47, no. 2 (2006): 229.
38. Dillman, Smyth and Christian, *Internet, Mail and Mixed-Mode Surveys*, 18.
39. Deutskens et al., "Response Rate and Response Quality," 34; Göritz, "Incentives in Web Studies," 70.
40. Porter and Umbach, "Student Survey Response Rates," 242-243.
41. Heerwegh, "Investigation of the Effect of Lotteries," 216; Porter and Whitcomb, "The Impact of Lottery Incentives," 402-403.
42. Porter and Umbach, "Student Survey Response Rates," 243.