Improving Student Participation Rates: What We’ve Learned about Incentives and Promotions

A NSSE Webinar Presented by

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Objectives

• What kinds of incentives are used by NSSE schools?
• Do lottery incentives impact response rates?
  – Which types are most effective?
  – Does it vary by first-year and senior populations?
• How are campus promotions implemented and who is involved? Do they impact response rates?
• Examples of effective campaigns to increase participation
• Q & A
Information Source

Survey Lottery Incentives and Institutional Response Rates: An Exploratory Analysis (Sarraf & Cole, 2014)

For a copy of the paper and presentation...
nsse.iub.edu/html/pubs.cfm
Background

• Incentives are increasingly used to boost or hold steady college survey response rates.

• Since 2010, use of incentives at NSSE institutions has increased from 35% (2010) to 54% (2014).

• Less empirical information about extent of campus promotional campaigns, but anecdotal evidence indicates greater frequency and benefits for response rates.
Incentives Literature for College Students

Various Experimental Studies Indicate Benefits:

Laguilles et al (2011)

• Using four different surveys, lottery incentives with iPods and dining gift cards ($50) significantly boosted responses rates between 5 and 9 percentage points; iPods better.

Parsons and Maniere (2013)

Millar and Dillman (2011)

• $2 prepaid incentive boosted response between 11% and 17%.
Survey Response Theories

Social Exchange Theory (Dillman, 1978)

Three factors
1) Reward: what do respondents expect to gain?
2) Cost: how much to obtain a reward?
3) Trust: expectation that the reward will outweigh the cost

Leverage-Salience Theory (Groves et al., 2000)

A decision-making theory that considers the “subjective weight” of
1) Leverage: importance
2) Salience: topic interest
3) Survey and invitation attributes
Incentives:

What are NSSE Schools Doing?
Incentive Type: Lottery or Guaranteed (NSSE 2013)

- No incentive: 53%
- Lottery: 43%
- Guaranteed: 2%
- Combination: 1%

92% of all incentive plans only involve lotteries

N = 621
Incentive Types Used (NSSE 2013)

- No Incentive: 53%
- Gift Card - Specific: 20%
- Technology: 13%
- Gift Card - General: 7%
- Cash: 7%
- Other Incentive: 1%

N = 621
How many different types of incentive combinations? (NSSE 2013)

- One: 87%
- Two: 11%
- Three: 2%
- Four: 0%

N = 294
Study Background
Sample & Data Sources

• **NSSE 2013** institutions (531 out of 621)
  
  Schools excluded:
  1) Used more than one incentive type
  2) Used a guaranteed incentive
  3) International institutions (Canadians retained)
  4) Halted administrations
  5) Statistically influential outliers

• **NSSE incentive data set** (229 institutions)

• **Quick Response Panel** (230 institutions)
Methods

• First-year and senior OLS Regression models

• Natural log of response rate used to address regression assumptions
  – Coefficients transformed and interpreted as percentages per log-linear model
  – **Important!** : a 15% coefficient does NOT mean response rate is 15% points greater

• 51% of variation explained for first-year students; 47% for seniors
Statistical Model Variables

Dependent Variables
Institutional Response Rates
• First –Year
• Senior

Promotional Effort
High
Medium
Low (reference)

Incentive Type
Cash
Gift Card – General
Gift Card – Specific
Technology
Other (school benefits, souvenirs, and other random approaches)

reference: no incentive used

Expenditures
Dollars spent per NSSE sample member
Measuring Promotional Effort with NSSE Quick Response Panel

Apart from participation incentives, how would you describe your NSSE 2013 promotional activities?

• We did not have any special promotional activities. Students only received our official recruitment messages. [Low Effort]
• We promoted the survey using one or two simple methods (e.g., posters, advertisements) but did not invest much otherwise. [Medium Effort]
• We promoted the survey in many different ways and invested significant effort in getting the word out. [High Effort]
Other Variables

School Characteristics

Campus Proportion of ...
  Full-time students
  Female
  African-American
  Latino

Canadian institution

Public institution

Undergraduate enrollment
Study Results
Question #1

Do lottery incentives correlate with higher NSSE response rates?
Response Rate % Increase by Incentive Type
(reference group: no incentive used)

<table>
<thead>
<tr>
<th>Incentive Type</th>
<th>First-Year</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>20%</td>
<td>13%</td>
</tr>
<tr>
<td>Gift Card - General</td>
<td>19%</td>
<td>11%</td>
</tr>
<tr>
<td>Cash</td>
<td>15%</td>
<td>12%</td>
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<tr>
<td>Gift Card - Specific</td>
<td>12%</td>
<td>7%</td>
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</tbody>
</table>

*p<.10; *p<.05; **p<.01; ***p<.001
Question #2

Do lottery incentives impact response rates differently for first-year and senior NSSE administrations?
Response Rate % Increase by Incentive Type
(reference group: no incentive used)

**Response Rate**

<table>
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<th>Senior</th>
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<td>12%</td>
<td>7%</td>
</tr>
</tbody>
</table>

**Incentive Type**

- Technology: +p<.10
- Gift Card - General: *p<.05
- Cash: **p<.01
- Gift Card - Specific: ***p<.001
Question #3

Are certain types of incentives more effective at increasing response rates than others?
Response Rate % Increase by Incentive Type
(reference group: no incentive used)

- **Technology**: 20% (***), 13% (**)
- **Gift Card - General**: 19% (**), 11% (*)
- **Cash**: 15% (*), 12% (*)
- **Gift Card - Specific**: 12% (**), 7% (+)

*p < .05; **p < .01; ***p < .001
+ p < .10
Senior Predicted Response Rates by Dollars Spent Per Sample Member on Technology and Specific Gift Card

Predicted rates assume a US private institution with 1,000 undergrads and high promotion level.
Question #4

What effect do campus promotions have above and beyond incentives? Does it vary by class level?
Response Rate Percentage Increase by NSSE Administration Promotion Level (reference group: low level promotion)

First-Year:
- High Promotion: 21%
- Medium Promotion: 21%

Senior:
- High Promotion: 9%
- Medium Promotion: 12%

Statistical significance:
- First-Year: \(+p<.10; *p<.05; **p<.01; ***p<.001\)
- Senior: \(*p<.05\)
Question #5

What promotional mediums do schools choose (posters, social media) and who is involved?
How Was NSSE Promoted?

- Posters, flyers (83%)
- Announcements by faculty (51%)
- Social media (49%)
- Print advertisements (44%)
- Learning management system (22%)
- Radio or television advertisements (8%)
- YouTube (1%)

How many different promotion methods were used?

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<tr>
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<td>22</td>
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<td>5</td>
<td>9</td>
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<td>6</td>
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</table>

Total 100

*Based on 132 Quick Response Panel respondents reporting High or Medium levels of promotion*
Who Promoted NSSE?

- More than one campus office (57%)
- One campus office (39%)
- Student leaders/high-profile students (34%)
- Central administration (30%)
- More than one academic dept. or school (26%)
- Other, please specify (12%)
- Other students (9%)
- One academic dept. or school (7%)

How many different types of groups promoted NSSE?

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<thead>
<tr>
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<tr>
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Based on 137 Quick Response Panel respondents reporting High or Medium levels of promotion.
Change in Predicted Response Rates
(by class level & Incentive Type)

- **Using Incentive**
- **Plus Doubling Investment ($0.40 to $0.80)**
- **Plus High Promotion Level**

**First Year: Technology**
- 5%
- 1%
- 5%

**First Year: Specific Gift Card**
- 3%
- 1%
- 5%

**Senior: Technology**
- 6%
- 2%
- 4%

**Senior: Specific Gift Card**
- 4%
- 1%
- 4%
Exemplar Promotional Campaigns
How Did They Accomplish This?

**University of Virginia**
- “Focus on engaging students in the assessment process, helping their voice be heard.”
- Newspaper ads; video boards
- Facebook & Twitter
- Emails to faculty; contacted student groups
- Table tents; Dedicated website
- Lottery incentives ($100, $50, $25 Amazon.com gift cards; Apple iPod and iPad)

**Boston University**
- Formed a collaborative, inter-departmental/faculty committee
- $5 campus card credit for all respondents
- Posters; table tents; mailbox stuffers; signs on shuttle buses; newspaper articles, tweets from Dean of Students office; in-class announcements
- Resident assistants kept their communities informed

For more information, visit: avillage.web.virginia.edu/iaas/survey/portal/2010-11/nsseoutreach.shtm
Conclusions

• Conducting lotteries can increase response rates between 3% and 6% but $s matter.

• Incentive impact varies by type and class level.
  – All types “work,” but Technology and General Gift Cards appear best; Specific Gift Cards less so.

• Campus promotions are effective, too: 4% to 5% increase with some effort

• Campus context matters as well as how things are implemented; try to experiment!
Encouraging Survey Participation: NSSE Website Resources

- Maximizing Your Number of Respondents Effectively and Ethically
- Tips for Your NSSE Survey Administration
- Examples of Promotional Materials
- Response Rate FAQ

[nsse.iub.edu/links/survey_promo](nsse.iub.edu/links/survey_promo)
For More Information...

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