SURVEYS 101: DEVELOPING A SURVEY FOR QUALITY IMPROVEMENT

Susan Thompson, Senior Research Analyst
susan@txstate.edu

Office of Institutional Research
245-2386
Presentation Overview

• Why do a survey
• Choosing a survey method
• What questions to ask
• Who to survey
• Resources for conducting a survey
• How to encourage responses
Reasons to Survey

- Identify need for new/changed programs or services
- Determine customer satisfaction with current programs or services
  - Identify areas where improvements can be made
- Evaluate impact of changes made to programs or services
  - Obtain benchmark first, then re-survey after change
Methods/Types of Surveys

• Questionnaires
  • Online
    • Emailed, posted link, kiosk
  • Paper/pencil
    • Mailed, group administration, point of service

• Interviews
  • Telephone or in-person
Choosing a Survey Method

What
- What is the purpose?
- What are you trying to find out?

Who
- Who has the answers to your questions?

How
- How can you best reach the target group?
Why Survey Methods are Important...

WE SURVEYED A THOUSAND PEOPLE WHO STILL HAVE LANDLINE PHONES AND NO CALLER I.D.

WE ASKED FOR THEIR OPINION ON OUR NEW TECHNOLOGY. 34% SAID, "FIDDLESTICKS," AND 23% COULDN'T HEAR THE QUESTION.

43% THOUGHT WE WERE IN THE ROOM WITH THEM AND OFFERED US A HARD CANDY.
Online Questionnaires

• Good for larger groups
• Lower cost (sometimes)
• Can customize survey and questions
  • Branching or routing
• No data entry required
• Quicker reporting of results (sometimes)
• Require tech support
• Yield lower response rates
Paper and Pencil Surveys

- Better for smaller groups
- Can be expensive
  - Printing and/or postage costs
- Variety of distribution methods can be used
  - Mail
  - Group setting
  - Point of service
  - The “Coke Break”
- Better response rate than online (in most cases)
Interviews

• Best for small groups
• More personal; harder to ignore or deny request
• Time/personnel intensive
• Require training for interviewer
• Can ask for clarification of responses
Choose a Survey Method for This Research Question:

- Are students who use services provided by our office satisfied?
- Do faculty and staff know about the services provided by my office?
- Why don’t students use our services?
- We are considering adding a new service. Would students use it?
- Do customers who call our office experience the same level of service as those who walk in?
When to Survey

- One time
- Recurring
  - Annual
  - Each semester
  - 1 week after service
  - At time of service

As a baseline or after improvements have been implemented
# Types of Data Collected on Surveys:

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Demographic** | Descriptive information about respondent  
                                | Gender, age, GPA, home location |
| **Behavioral**   | How does respondent behave?  
                                | Use/non-use, frequency, actions |
| **Attitudinal**  | Respondent’s opinions/attitudes  
                                | Satisfaction, agreement, preference |
Demographic Questions

• Use to determine how closely your respondents represent the target group

• Use to compare responses among groups of people with similar characteristics
  • Male/female; traditional/nontraditional student; new staff/long-time staff, etc.

• Use sparingly
  • Can seem intrusive and discourage response
  • Do not require response
Behavioral Questions

• Use to compare responses among groups of people who behave in a similar way
  • Users/non-users; first-time/long-time customer

• Ask about specific time frame to ensure respondents have the same understanding of the question
  • More recent is better; memory introduces error

• Ask about respondent’s behavior only
Attitudinal Questions

- Use to collect opinions and attitudes
  - Evaluation of a program or service
  - Demonstrate need

- Often responses are presented on a scale
  - Agree-Disagree; Satisfied-Dissatisfied; Excellent-Poor, etc.

- Attitudes predict behavior
# Workshop: Writing Effective Survey Questions for Quality Improvement

## February 2016

<table>
<thead>
<tr>
<th>SU</th>
<th>MO</th>
<th>TU</th>
<th>WE</th>
<th>TH</th>
<th>FR</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>28</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sampling
Why Sample?

• Reduce survey fatigue by limiting number of surveys received
  • UPPS 01.03.05 Administrative Survey Policy discourages surveying all students or large proportion

• Target smaller number of individuals, so resources can be used effectively to encourage responses
  • Save money, time
  • Smaller sample with higher response rate is more desirable than a larger sample with lower response rate

• Can make data entry/reporting/analysis easier
### How Many to Sample?

**Examples:**

<table>
<thead>
<tr>
<th>Population Size</th>
<th>+/- 5% level of precision</th>
<th>+/- 3% level of precision</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>132</td>
<td>169</td>
</tr>
<tr>
<td>1,000</td>
<td>278</td>
<td>517</td>
</tr>
<tr>
<td>10,000</td>
<td>370</td>
<td>965</td>
</tr>
<tr>
<td>37,000</td>
<td>381</td>
<td>1,038</td>
</tr>
<tr>
<td>1,000,000</td>
<td>384</td>
<td>1,066</td>
</tr>
</tbody>
</table>

**Sample Size Calculator:**

Software Options for Online Surveys

• **Gato**
  - Examples:
    - [http://www.lbjsc.txstate.edu/soc/advisors/advisorresourcesurvey.html](http://www.lbjsc.txstate.edu/soc/advisors/advisorresourcesurvey.html)
    - [http://www.fss.txstate.edu/budget/Survey/1to1.html](http://www.fss.txstate.edu/budget/Survey/1to1.html)

• **Survey Monkey**
  - Free for <10 questions, <100 responses; $300/year for regular use
  - Others: Zoomerang, SurveyGizmo, PollDaddy, LimeSurvey

• **Snap Surveys**
  - Coordinated by TREC
  - Training required; steeper learning curve
  - [http://www.txstate.edu/trec/iirda/researchSupport/snap](http://www.txstate.edu/trec/iirda/researchSupport/snap)
Sources for Distribution Lists

http://www.ir.txstate.edu/ir-self-service/distribution-lists.html

**Email List Management**

- email distribution list for students based on general criteria (e.g. major, classification, residence hall, hours completed).
- email distribution list for faculty and/or staff based on general criteria (e.g. division, department, employment status, EEO Category, etc.
- email can be sent from within the application or downloaded for use in a mail merge.

**Report Net Portal** - allows more detailed selection of students including Classification, GPA, Major, Gender, Race/Ethnicity, and a several other fields.
Select a Random Sample Using Excel

After downloading a list…

1. Make note of how many people are in the file.
2. Create a new column. Use the “random between” function to create a random number for each person listed in the file. The formula is “=RANDBETWEEN(1,x)” where x=the number of people in the list.
3. Copy the entire column of random numbers, then paste them back into the same column using the “Paste Special – paste values” option, so that the column now contains the actual values instead of the formula.
4. Sort the file on the random number column.
5. Select the number of people you need for your sample, starting with row number 1 and counting down until you reach the target number. You can copy them out and save into a different file, or you can delete the extra people from the bottom of the list.
Options for Analyzing Paper Survey Responses

- Better to collect responses on questionnaire, instead of separate answer sheet
- Data can be entered into Excel file for analysis and reporting
Survey Design

- Use a simple design
  - Few images, simple colors, no clutter
- Start with easy or interesting questions
- Logically order questions
- Logically order responses
- The shorter, the better
  - On web, use progress indicator or number pages
  - Minimize number of pages
- Collect demographic information at end
- Ask relevant questions
- For online surveys, consider screen size and ask shorter questions
Survey Invitation Message

• Message must be salient
  • Clearly affiliate with institution/office/program
  • Explain why person was selected
  • Explain purpose of survey

• Personalize!

• Provide honest estimate of time to complete survey

• For online surveys:
  • Explain how data will be kept secure
  • Provide a technical contact for help with problems
  • Send messages at appropriate times
  • Send no more than 3 messages (First invite + 2 reminders)
Anonymity vs. Confidentiality

ACCORDING TO THE ANONYMOUS ONLINE EMPLOYEE SURVEY, YOU DON'T TRUST MANAGEMENT. WHAT'S UP WITH THAT?

OH. RIGHT.

© 2010 Scott Adams, Inc. Dist. by UFS, Inc.
Is My Survey Anonymous or Confidential?

Anonymous Surveys:

• When you **cannot** identify an individual’s responses
• Can give a sense of security to respondents, and thereby increase response rate
• If reminders are sent, can use “If you have already responded, thank you... if not, please respond…” in message

Confidential Surveys:

• When you **can** identify an individual’s responses, but **will not** release their individual data
• Allows for matching responses with other data
• Allows for tracking responses; can target reminder messages to non-respondents
Pilot Test Your Survey!

Before starting a survey, always test to find out:

• Are the instructions clear?
• Are the questions interpreted the same way by all respondents?
• Can every question be answered?
• Did you include all the possible response categories?
• How long does the survey take to complete?
What Response Rate Can I Expect?

Recent Survey Response Rates at Texas State

- Freshmen: 89%
- On Campus Students: 33%
- Seniors: 23%
- Students: 2%
- Faculty & Staff: 19%
Strategies to Increase Responses

• Choose best survey method – way to reach target group
  • Use personal contact whenever possible
• Use a well-designed questionnaire
• Communicate clearly in recruitment messages
• Use a respected sponsor
• Make the return easy and free
• Use incentives such as thank you gifts or raffle drawings
• Follow up with sample
  • Use reminder messages, phone calls
• Send pre-notification that people have been selected to participate
  • They will expect the survey and view it as a legitimate invitation
Administrative Survey Approval

- UPPS 01.03.05 “Administrative Surveys”
- Administrative Survey:
  - Collects information directly from individuals who comprise a significant proportion of the university community
  - For quality improvement purposes, not academic research
- University Survey Committee reviews & approves surveys, maintains calendar to schedule surveys
  - July 1 and November 1 priority deadlines
- Process and forms posted on Institutional Research website
  - [http://www.ir.txstate.edu/survey-services/admin-surveys-services.html](http://www.ir.txstate.edu/survey-services/admin-surveys-services.html)
Administrative Survey Calendar

http://www.ir.txstate.edu/survey-services/admin-survey-calendar.html

The University Survey Committee (USC) maintains a Calendar of Administrative Surveys; surveys that meet criteria specified in the Administrative Survey Policy must be submitted to the USC for review and scheduling prior to administration. Please follow instructions on the USC website to submit an administrative survey project to the USC.

Departments are encouraged to consult this calendar when planning surveys, to assist with scheduling and to identify alternative sources of data whenever possible.
References

Publications:

Website:
• Institutional Research’s Survey Design Resources: http://www.ir.txstate.edu/survey-services/survey-resources.html