Survey Basics
Designing and Administering Useful Surveys

Sponsored by:

Illinois Public Health Institute (IPHI)

Illinois Department of Public Health (IDPH)

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Trainer

Chris Giangreco, PhD

If you have questions for the trainer, please email Laurie Call at laurie.call@iphionline.org

Training Objectives

1. Understand the basic components of developing a survey
2. Learn how to test a survey for cultural appropriateness
3. Assess the use of survey questions for gathering appropriate data
4. Explore the importance of collection, analysis, and reporting survey results
5. Apply the use of an online, web-based survey tool

Training Layout:

- Introduction & Basic Definitions
- Preparing
- Writing
- Testing
- Administering
- Analyzing & Presenting Findings
- Using Web-based Survey Tools

What is survey research?

- A method of gathering information from a sample of individuals by a standardized procedure so that every individual is asked the same question in more or less the same way.
- Surveys are used to obtain a composite profile of a population through the use of a representative sample of said population.
- Surveys can be self-administered or administered by a researcher.

General Benefits & Barriers of Using a Survey

Benefits	Barriers
Relatively inexpensive	Relies on common knowledge
Reach large population	Inflexible
Reach remote populations	Appropriate sample
Standardized responses	Limited chances for clarification
Privacy can be assured	Cannot deal with context

Types of Surveys

- Written Surveys
  - Mail survey
  - Face-to-face surveys
- Oral Surveys
- Electronic Surveys

Written Surveys

- Written surveys are self-administered by the respondent after the document has been transmitted in some fashion from the researcher to the respondent. One example is the Census Bureau's decennial general survey (SF1).
- They are considered to be less personal, and can be used to collect more sensitive information, especially if collected confidentially or anonymously.

Written Surveys

- Mail
  - Benefits: cost, convenience, bias, sample size
  - Barrier: response rate, ability for respondents to answer correctly
- Group administered
  - Benefits: response rate, sample specificity
  - Barrier: small sample, scheduling

Oral Surveys

- Oral surveys are administered by a researcher, where the questions and answer options are read out loud to the respondent. Some examples are phone surveys and in-person questionnaires.

Oral Surveys

- Benefits:
  - Personal Contact
  - Response Rate
- Barriers:
  - Cost
  - Bias
  - Limited question responses
  - Attitude

Electronic Surveys

- Electronic surveys are a relatively new form of survey research using email or web-postings to collect respondents' feedback.
- Research is still being developed on the use of electronic surveys. Some emerging findings:
  - Electronic surveys are best used on specific populations that have easy access to the technology needed to conduct surveys.
  - Because of "spam" problems, it is important to notify respondents of the survey before it is administered.
  - Electronic surveys are not useful for conducting surveys on "strangers" or those unfamiliar with the researcher or organization administering the survey.

Electronic Surveys

- Benefits:
  - Cost
  - Ease of Analysis
  - Faster Transmission
  - Ease of respondent preparation
  - Higher response rate
  - More candid responses
  - Quicker response time
  - Wider magnitude of coverage
- Barriers:
  - Sample limitations
  - Lower level of confidentiality
  - Layout & presentation limitations
  - Additional orientation/ instructions needed
  - Response rates plummet as time expands
  - Technical problems interfere

Exercise

- Let's look at some scenarios to review what type of surveys would work best for the situation:
  - Written
  - Oral
  - Electronic

Exercise

1. You want to examine the exercise habits of women over 65 years old in your community.
2. You need to determine the average household expenditure on fruits and vegetables in your community.
3. You wish to understand the reasons why staff at the local health department go to the doctor.
4. Your need to examine the incidence of diabetes in your community.

Preparing the Survey

- Define your research question:
  - What is the purpose of the survey? What do you want to know from your respondents?
- Assess the Cost:
  - How much money, staff time, and materials are available to conduct the survey?
- Determine the use of existing resources:
  - Assess the relationships and networks available that can help administer the survey, especially for non-traditional groups.
- Understand your respondents:
  - How would the target population respond to the survey? Do you have access to the appropriate respondents?
- Look at other surveys – borrow

Reliability & Validity

- Reliability - instrument and procedures yield the same results in repeated trials
  - Measurement and process quality
- Validity – degree to which the study accurately reflects the specific concept measures
  - External validity: generalizable results
  - Internal validity: rigor, conduct, and relationship of findings

Writing the Survey:

- Question Types
- Format
- Wording
- Content
- Order
- Pretesting

"Please, **Ma'am — I'm running out of paper!"**

Question Types

- Open-ended questions:
  - "What do you think is the most important public health issue facing our nation?"
- Closed-ended questions
  - "Rank the following public health issues in order of impact on our nation
    - Access to health care
    - Quality of providers
    - Cost of care
    - Racial & ethnic make-up of providers

Question Types

- Ranking (e.g. Likert-scale)
  - How important is exercise to a healthy lifestyle?
    1) Very important; 2) Important 3) Not important
  - Rank from 1-3 the impact of the following on your eating habits:
    - Cost
    - Availability at local store
    - Health impact
- Numerical
  - How many times in a week do you go to the grocery store?

Question Types

- Multiple Choice
  - Why do you eat fruits and vegetables?
    - They are good for my health.
    - I enjoy their taste.
    - They are the only food I can afford.
- Categorical (Nominal)
  - Chose the following that best describes your gender:
    - Male
    - Female
    - Transgendered

Question Format

- Split or unfolding questions
- Funneling questions
- Factorial questions

Wording

- Direct
- Simple
- Specific
- Discrete
- Culturally appropriate

"Stupid woman-of course I WATCH television, what else are you supposed to do with it???"

Content

- Elicit response you desire?
- Necessary?
- Topic need multiple questions?
- Need context for appropriate answers?
- Succinct, but robust?
- Would you answer the survey?
- Would the respondents answer the survey?

Order

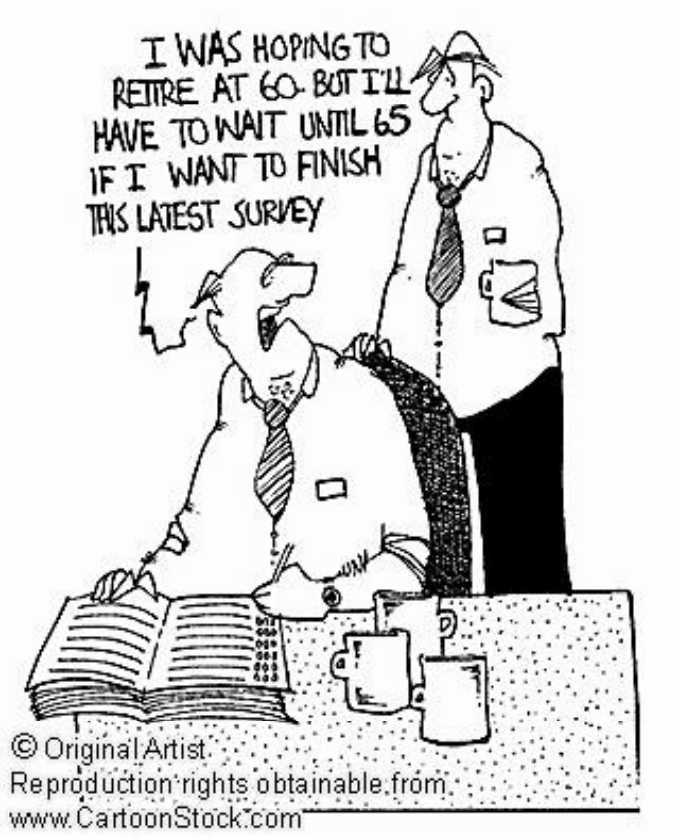
- Warm-up questions at the beginning
- Avoid starting with open-ended questions
- Create question “sets”
- Ease into sensitive questions
- Use transition questions
- Put the most important questions near the middle.

Review & Exercise

1. Do you smoke cigarettes or chew tobacco when you play sports?
    1. Yes
    2. No
2. How many times a week do you see advertisements for tobacco?
3. Most athletes do not smoke cigarettes. What sports do you play?
    1. Tennis
    2. Golf
    3. Soccer
    4. Volleyball

Pretesting

- Giving the survey to a "stranger"
- Conducting informal interviews
- Holding a focus group
  - Test language & concepts

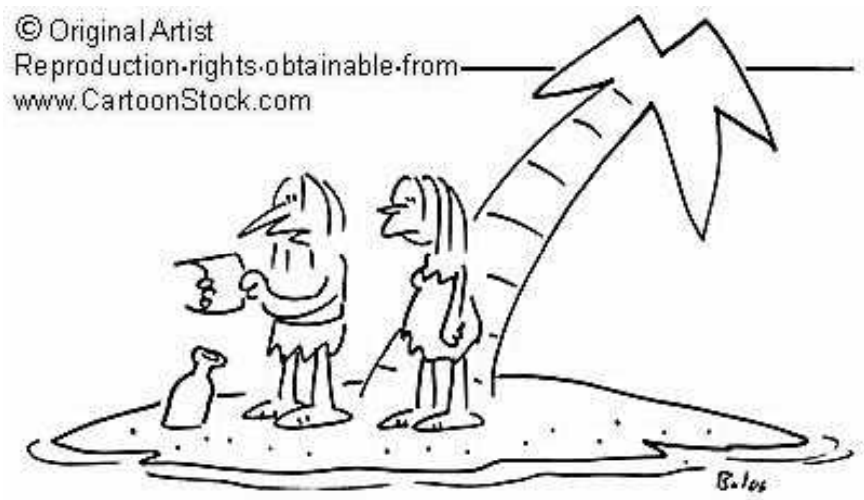


Assuring Cultural Appropriateness

- Translation needed?
  - Done by a certified (medical) translator
- Gender & race neutral questions
- Steer clear of judgments and assumptions
  - If in doubt, use open-ended questions
- Avoid questions that could lead to social desirability bias

Sampling

- Nonprobability
  - Purposive
  - Volunteer
  - Quota
- Probability
  - Simple random



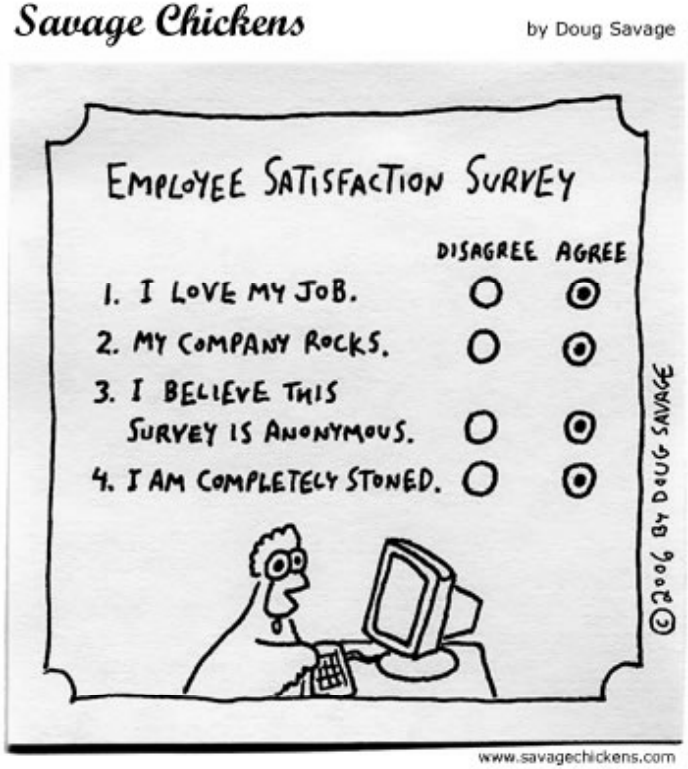
"It's a Zogby poll."

Administering the Survey

- Written:
  - Introductory letter
  - “Reward”
  - Self-addressed, stamped envelope for collection
  - Follow-up mailings with the survey to improve response rate
- Oral
  - Appearance: dress, voice, approach for the target population
  - Avoid wasting time
  - Professional & serious
  - Time and location suitable for target population

Survey Responses

– Nonresponse errors
– Response errors



Analyzing the Results:

- Choose a database
- Create a codebook
- Clean the data
- Run statistics
  - Charts/ graphs
  - Aggregates
  - Averages

87% OF THE 56% WHO COMPLETED MORE THAN 23% OF THE SURVEY THOUGHT IT WAS A WASTE OF TIME

Reporting the Results:

- Introduce the research question
- Explain the use of the survey method
  - Justify the sample
  - Describe how the survey helps answer the research question
  - State any limitations
- Present the data

Reporting Examples

- Explain the context/issue that justifies the finding: Fruits and vegetables are expensive in our community, keeping people from eating them.
- 57% of people surveyed said they don't buy fruits and vegetables because they are too expensive.
- 78% of people reported that they would buy more fruits and vegetables if they were less expensive.
- State the finding: The reduction in the cost of fruits and vegetables in our community would likely increase residents consumption of them.

Using an Electronic Survey

- Sample representative-ness
- Data analysis
- Confidentiality vs. Anonymity
- Responsible quotation

SurveyMonkey - Create New Survey - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.surveymonkey.com/MySurvey_Wizard.aspx

beijing national aquatic center

Gmail - [SurveyMonkey.com] Account ... | Chicago Police Department - CLEARpa... | SurveyMonkey - Create New Sur...

SurveyMonkey.com
because knowledge is everything

Logged in as "cgiangreco" Log Off

Home | Create Survey | My Surveys | Address Book | My Account | Help Center

You have a **basic account**. | To remove the limits of a basic account, including unlimited questions, upgrade now!

Create a New Survey

Select one of the options below to get started. If you already have an idea for your survey, just create a new survey from scratch. If you are a Professional user and need a creative spark, select one of our pre-existing templates to modify and use for free.

How Would You Like to Create a New Survey?

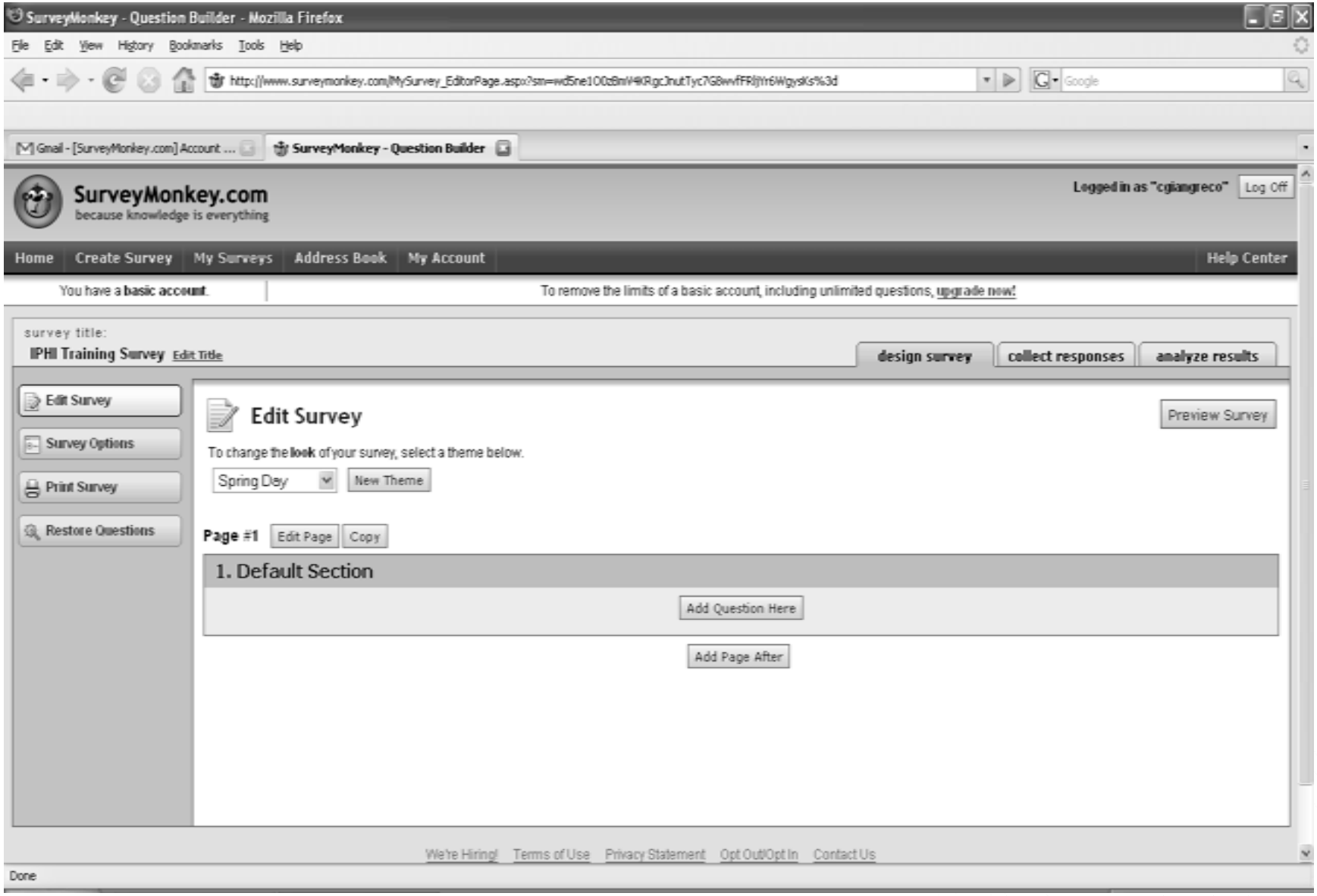
- Copy an existing survey
  - –Select an Existing Survey–
- Use a survey template (disabled)
  - Please upgrade to a professional account to enable this feature.
- Create a new survey from scratch

Enter a Title for this Survey:

Title: (max 100 characters)

Cancel | Create Survey >>

Done



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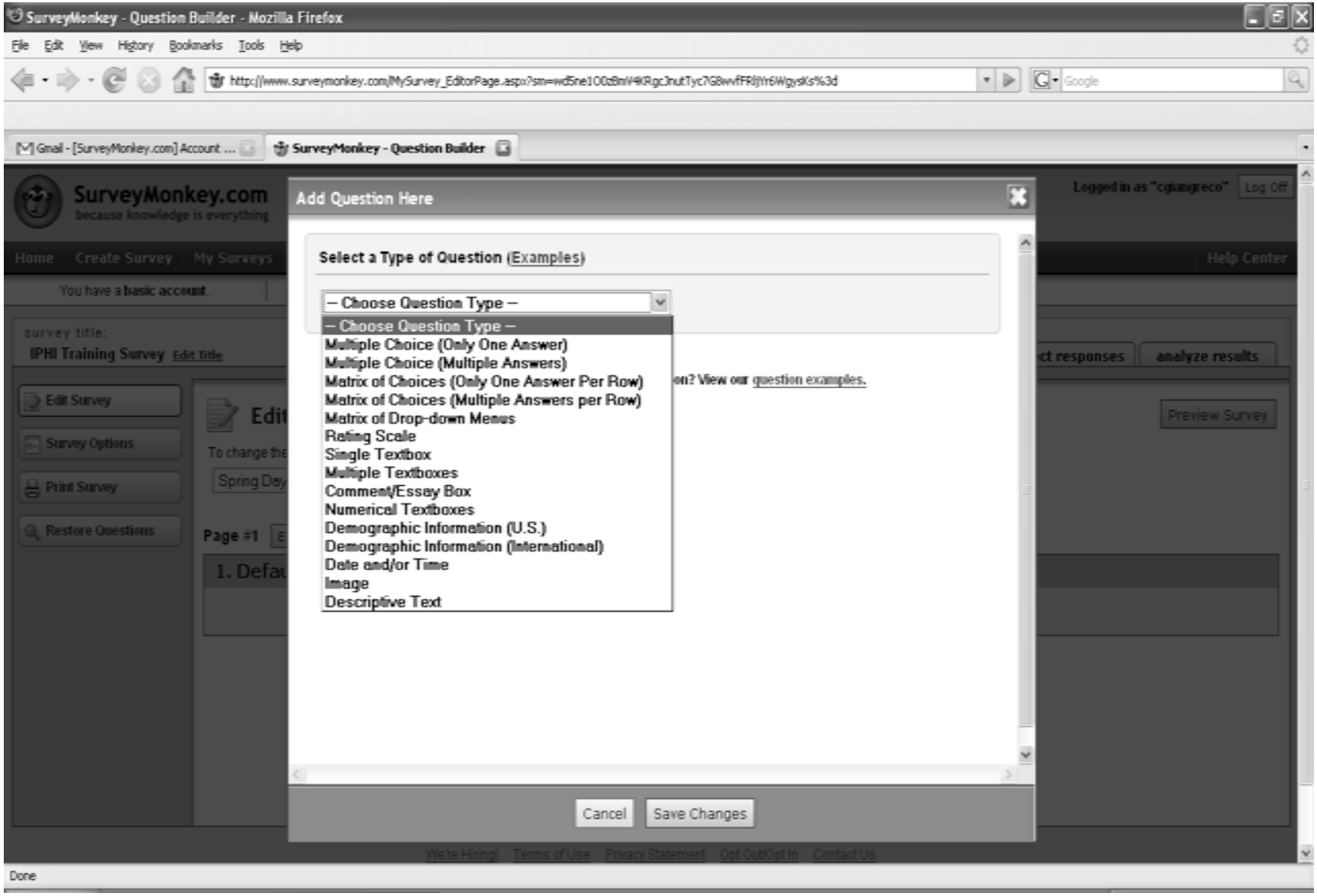

SurveyMonkey - Question Builder - Mozilla Firefox
File Edit View History Bookmarks Tools Help
SurveyMonkey - Question Builder
SurveyMonkey.com
because knowledge is everything
Add Question Here
Select a Type of Question (Examples)
– Choose Question Type –
– Choose Question Type –
Multiple Choice (Only One Answer)
Multiple Choice (Multiple Answers)
Matrix of Choices (Only One Answer Per Row)
Matrix of Choices (Multiple Answers per Row)
Matrix of Drop-down Menus
Rating Scale
Single Textbox
Multiple Textboxes
Comment/Essay Box
Numerical Textboxes
Demographic Information (U.S.)
Demographic Information (International)
Date and/or Time
Image
Descriptive Text
Cancel
Save Changes
Edit Survey
Survey Options
Print Survey
Restore Questions
Preview Survey
Done

http://www.surveymonkey.com - SurveyMonkey - Question Examples - Mozilla Firefox

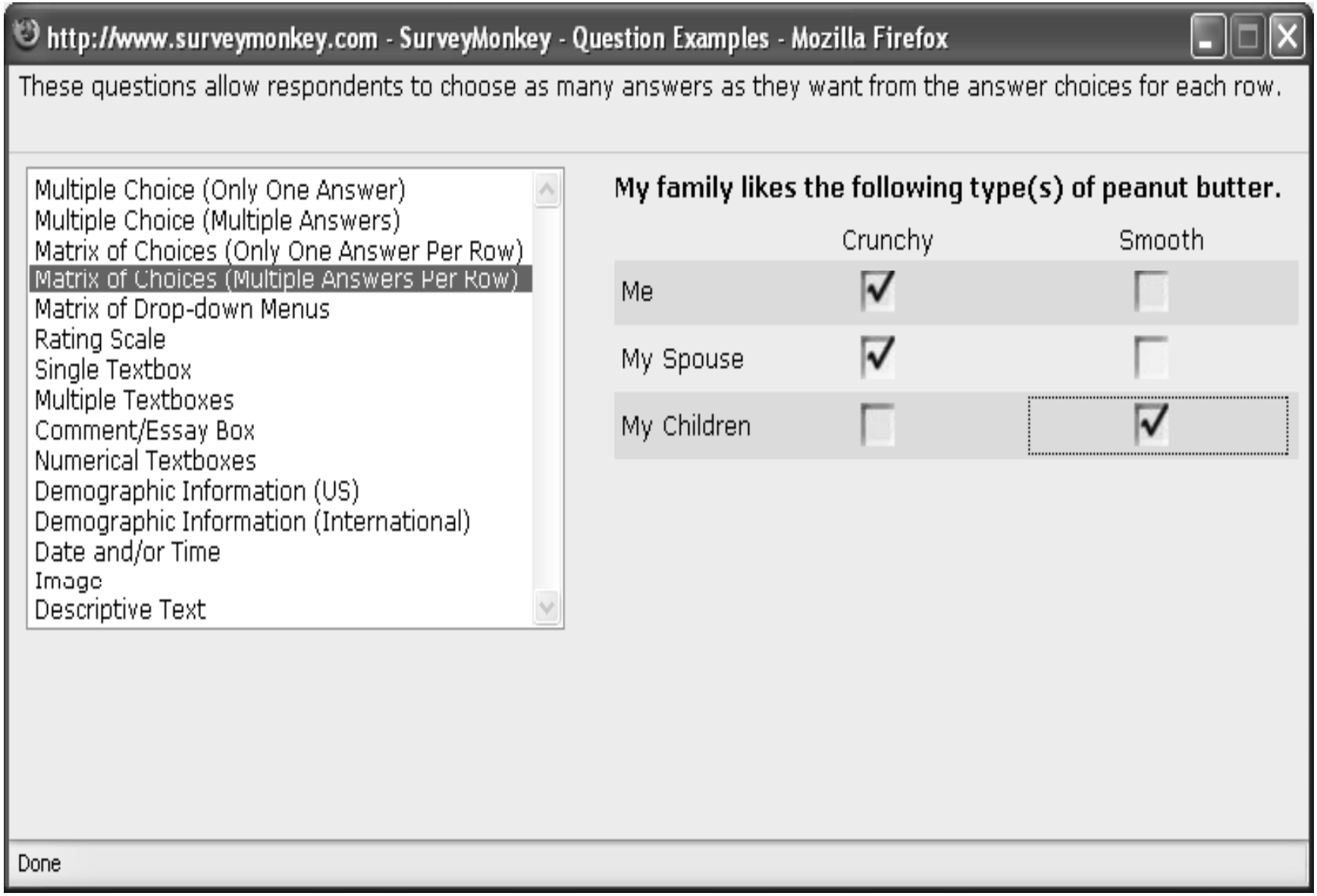
These questions allow respondents to choose as many answers as they want from the answer choices. Perfect for those "Choose all that apply" questions.

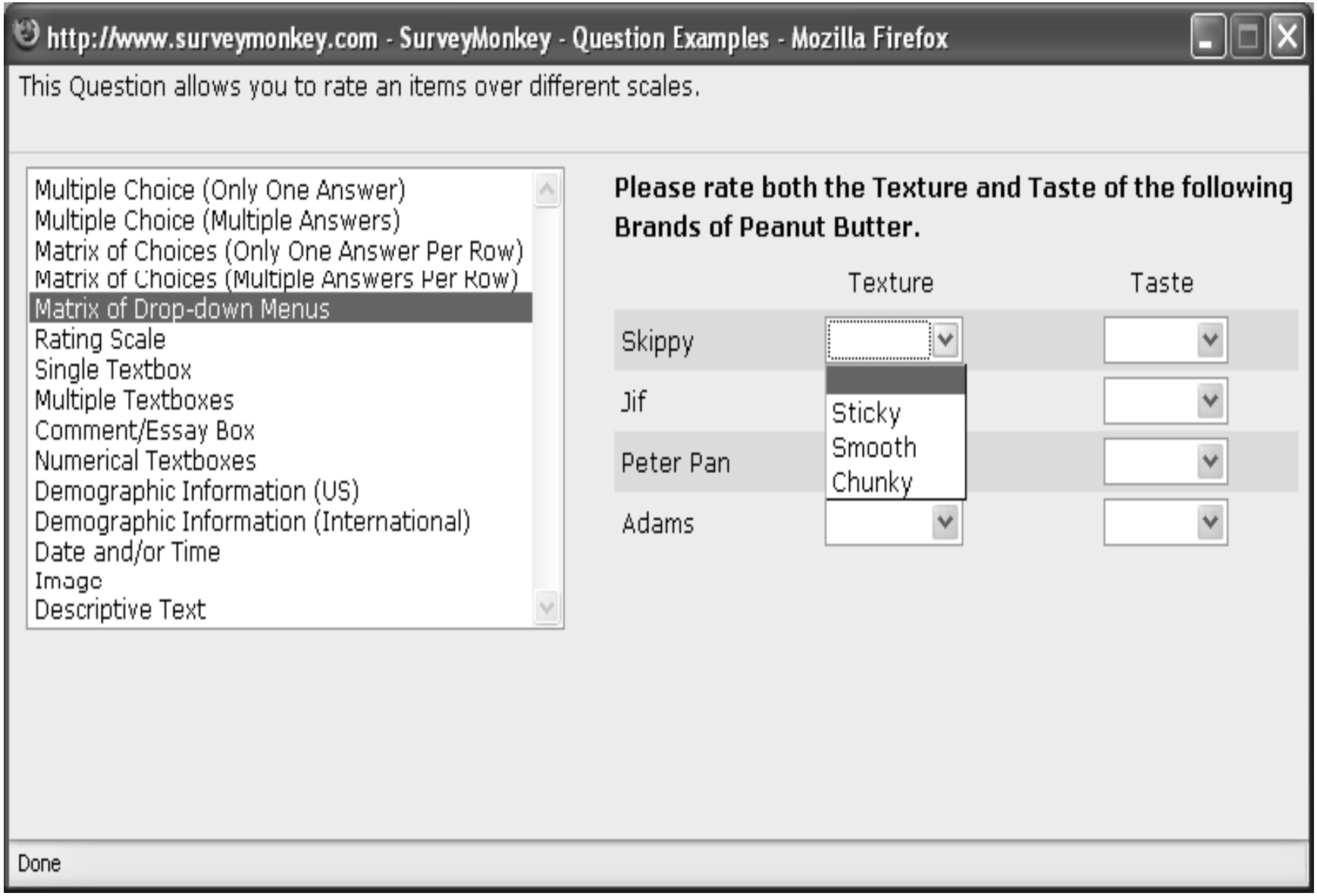
- Multiple Choice (Only One Answer)
- Multiple Choice (Multiple Answers)
- Matrix of Choices (Only One Answer Per Row)
- Matrix of Choices (Multiple Answers Per Row)
- Matrix of Drop-down Menus
- Rating Scale
- Single Textbox
- Multiple Textboxes
- Comment/Essay Box
- Numerical Textboxes
- Demographic Information (US)
- Demographic Information (International)
- Date and/or Time
- Image
- Descriptive Text

What type(s) of peanut butter do you like? (Please choose all that apply.)

- [ ] Crunchy
- [ ] Smooth
- [ ] Other (please specify)

Done


http://www.surveymonkey.com - SurveyMonkey - Question Examples - Mozilla Firefox
These questions allow respondents to choose as many answers as they want from the answer choices for each row.
Multiple Choice (Only One Answer)
Multiple Choice (Multiple Answers)
Matrix of Choices (Only One Answer Per Row)
Matrix of Choices (Multiple Answers Per Row)
Matrix of Drop-down Menus
Rating Scale
Single Textbox
Multiple Textboxes
Comment/Essay Box
Numerical Textboxes
Demographic Information (US)
Demographic Information (International)
Date and/or Time
Image
Descriptive Text
My family likes the following type(s) of peanut butter.
Crunchy
Smooth
Me
My Spouse
My Children
Done


http://www.surveymonkey.com - SurveyMonkey - Question Examples - Mozilla Firefox
This Question allows you to rate an items over different scales.
Multiple Choice (Only One Answer)
Multiple Choice (Multiple Answers)
Matrix of Choices (Only One Answer Per Row)
Matrix of Choices (Multiple Answers Per Row)
Matrix of Drop-down Menus
Rating Scale
Single Textbox
Multiple Textboxes
Comment/Essay Box
Numerical Textboxes
Demographic Information (US)
Demographic Information (International)
Date and/or Time
Image
Descriptive Text
Please rate both the Texture and Taste of the following Brands of Peanut Butter.
Texture
Taste
Skippy
Jif
Peter Pan
Adams
Sticky
Smooth
Chunky
Done

http://www.surveymonkey.com - SurveyMonkey - Question Examples - Mozilla Firefox

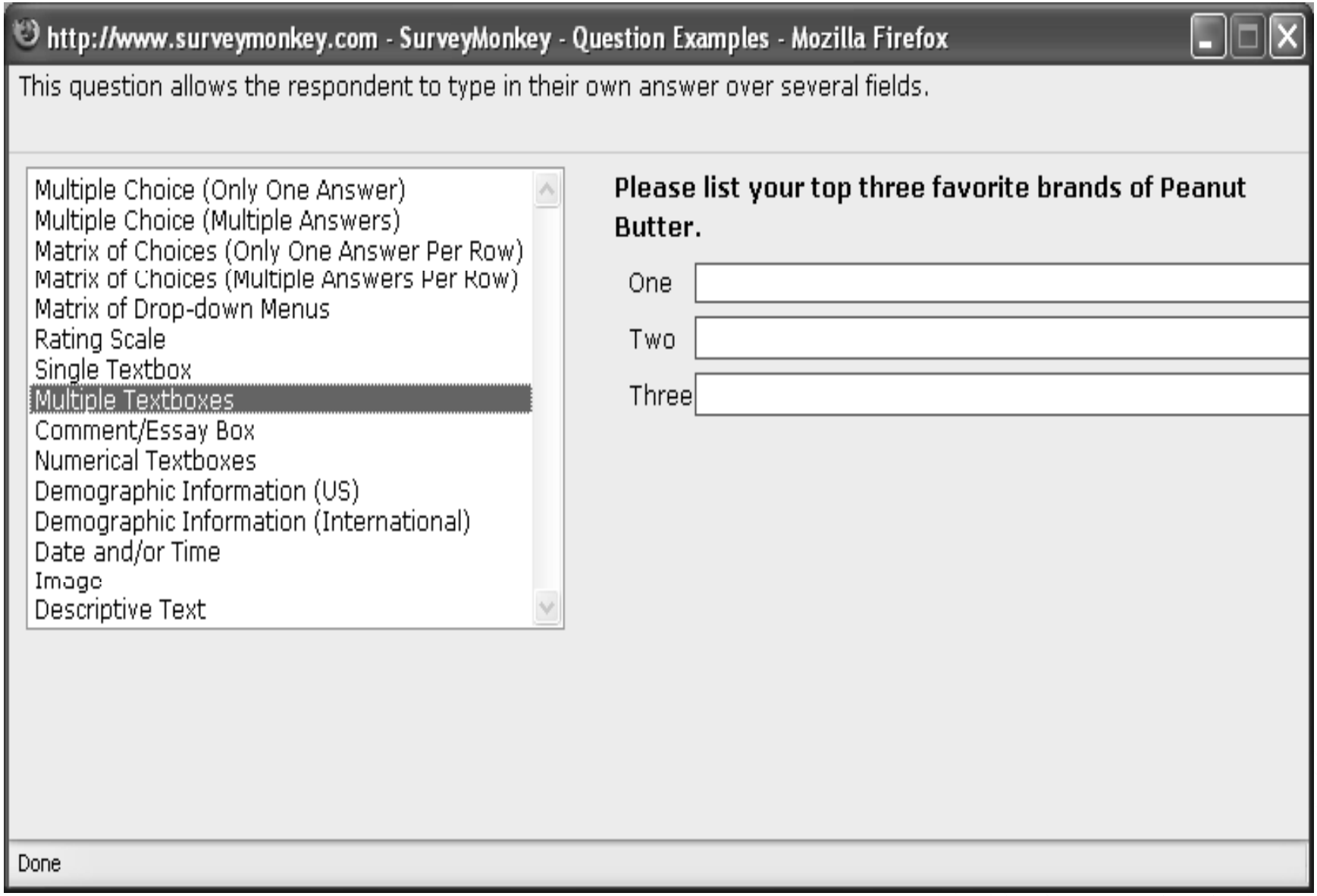
These questions allow respondents to rate items based on some rating criteria.

- Multiple Choice (Only One Answer)
- Multiple Choice (Multiple Answers)
- Matrix of Choices (Only One Answer Per Row)
- Matrix of Choices (Multiple Answers Per Row)
- Matrix of Drop-down Menus
- Rating Scale
- Single Textbox
- Multiple Textboxes
- Comment/Essay Box
- Numerical Textboxes
- Demographic Information (US)
- Demographic Information (International)
- Date and/or Time
- Image
- Descriptive Text

Please rate the following qualities of peanut butter.

	Extremely Important	Important	Doesn't Matter Much	Deal Breaker	N/A
Salty	○	○	○	○	○
Crunchy	○	○	○	○	○
Smooth	○	○	○	○	○
Brown	○	○	○	○	○
Nutty	○	○	○	○	○

Done


http://www.surveymonkey.com - SurveyMonkey - Question Examples - Mozilla Firefox
This question allows the respondent to type in their own answer over several fields.
Multiple Choice (Only One Answer)
Multiple Choice (Multiple Answers)
Matrix of Choices (Only One Answer Per Row)
Matrix of Choices (Multiple Answers Per Row)
Matrix of Drop-down Menus
Rating Scale
Single Textbox
Multiple Textboxes
Comment/Essay Box
Numerical Textboxes
Demographic Information (US)
Demographic Information (International)
Date and/or Time
Image
Descriptive Text
Please list your top three favorite brands of Peanut Butter.
One
Two
Three
Done

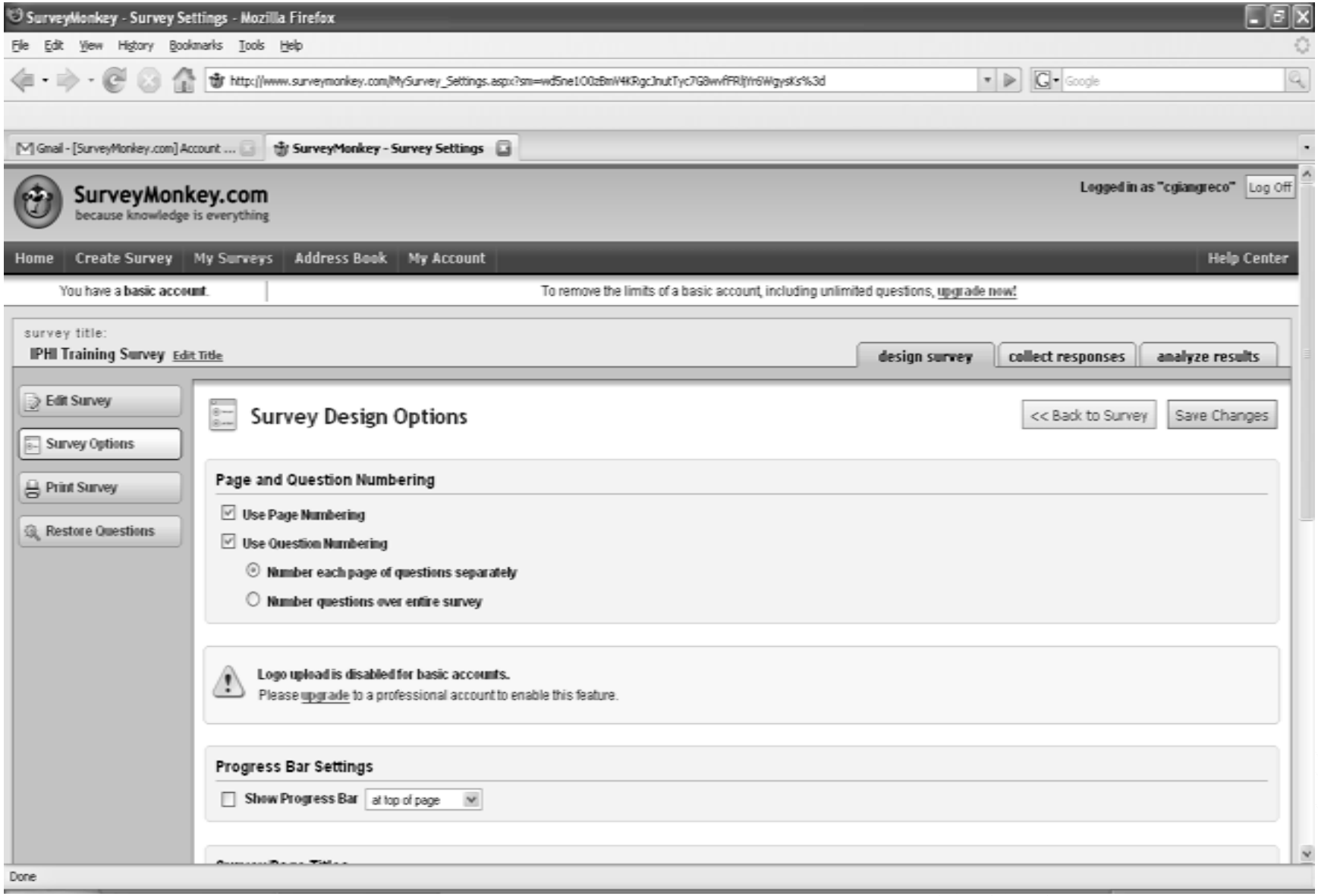
http://www.surveymonkey.com - SurveyMonkey - Question Examples - Mozilla Firefox

This question allows the respondent to type in a large amount of text for their response.

- Multiple Choice (Only One Answer)
- Multiple Choice (Multiple Answers)
- Matrix of Choices (Only One Answer Per Row)
- Matrix of Choices (Multiple Answers Per Row)
- Matrix of Drop-down Menus
- Rating Scale
- Single Textbox
- Multiple Textboxes
- Comment/Essay Box
- Numerical Textboxes
- Demographic Information (US)
- Demographic Information (International)
- Date and/or Time
- Image
- Descriptive Text

Please describe your first experience with Peanut Butter.

Done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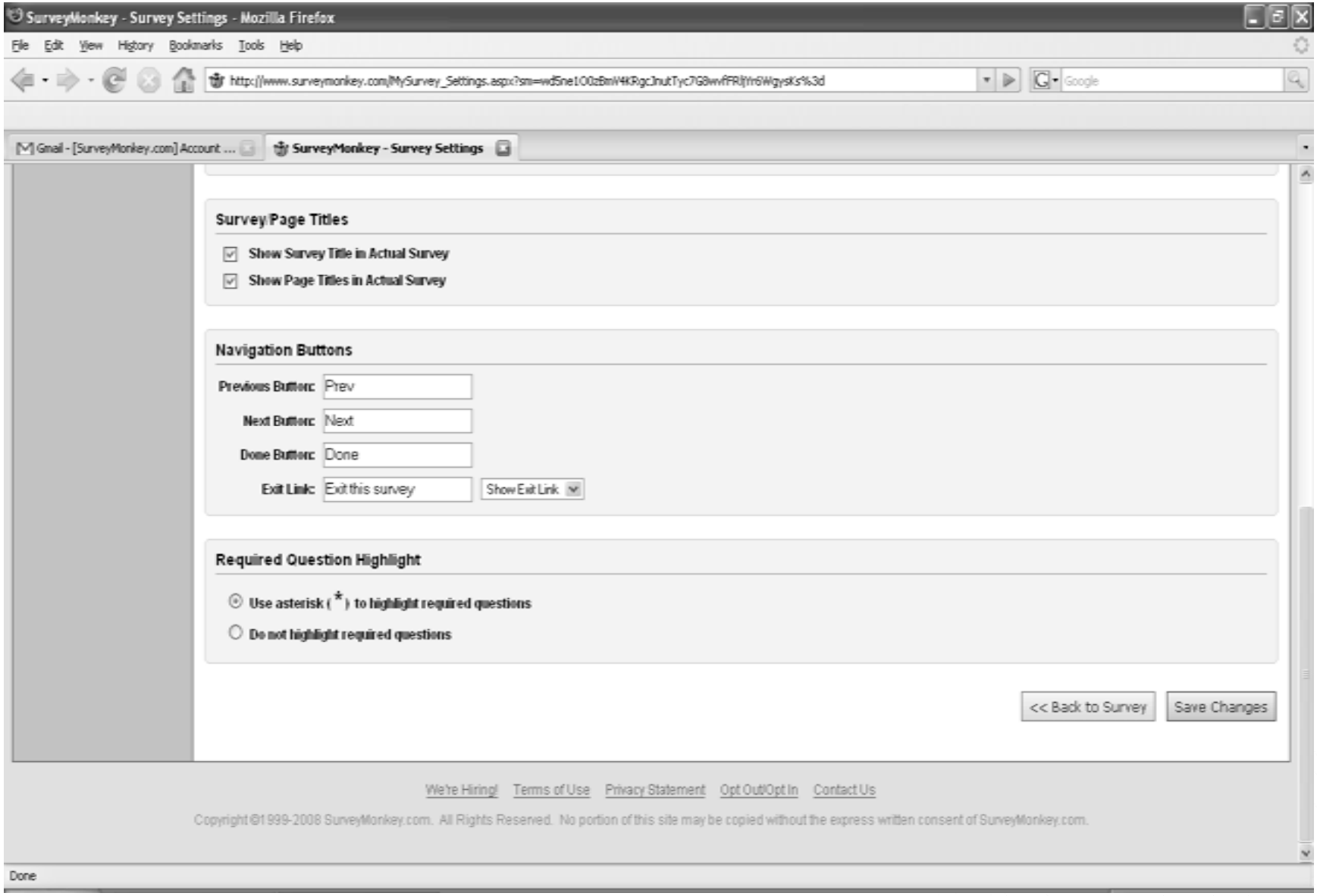
because knowledge is everything
Logged in as "cgiangreco"
Log Off
Home
Create Survey
My Surveys
Address Book
My Account
Help Center
You have a basic account.
To remove the limits of a basic account, including unlimited questions, upgrade now!
survey title:
IPHI Training Survey
Edit Title
design survey
collect responses
analyze results
Edit Survey
Survey Options
Print Survey
Restore Questions
Survey Design Options
<< Back to Survey
Save Changes
Page and Question Numbering
Use Page Numbering
Use Question Numbering
Number each page of questions separately
Number questions over entire survey
Logo upload is disabled for basic accounts.
Please upgrade to a professional account to enable this feature.
Progress Bar Settings
Show Progress Bar
at top of page
Done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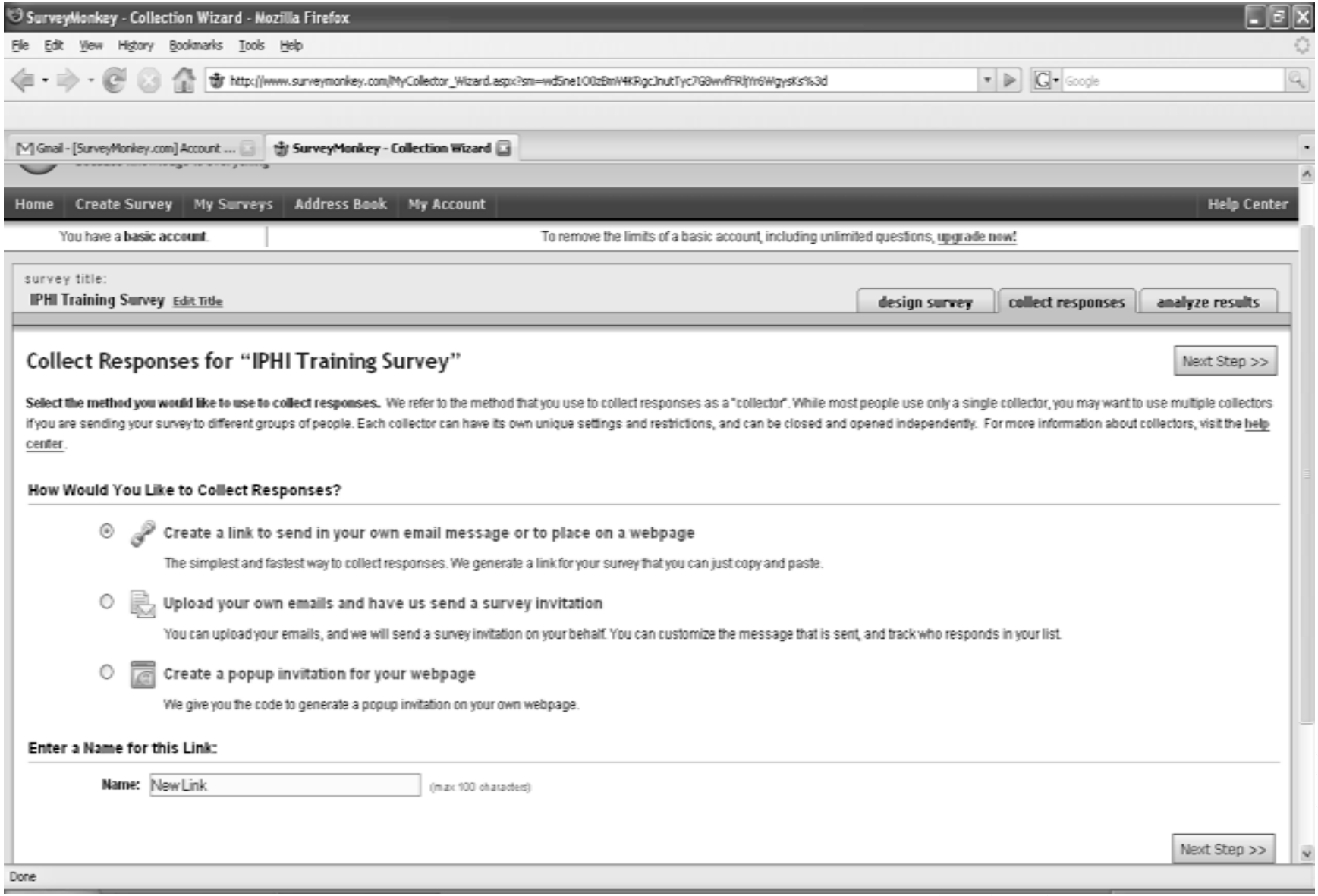
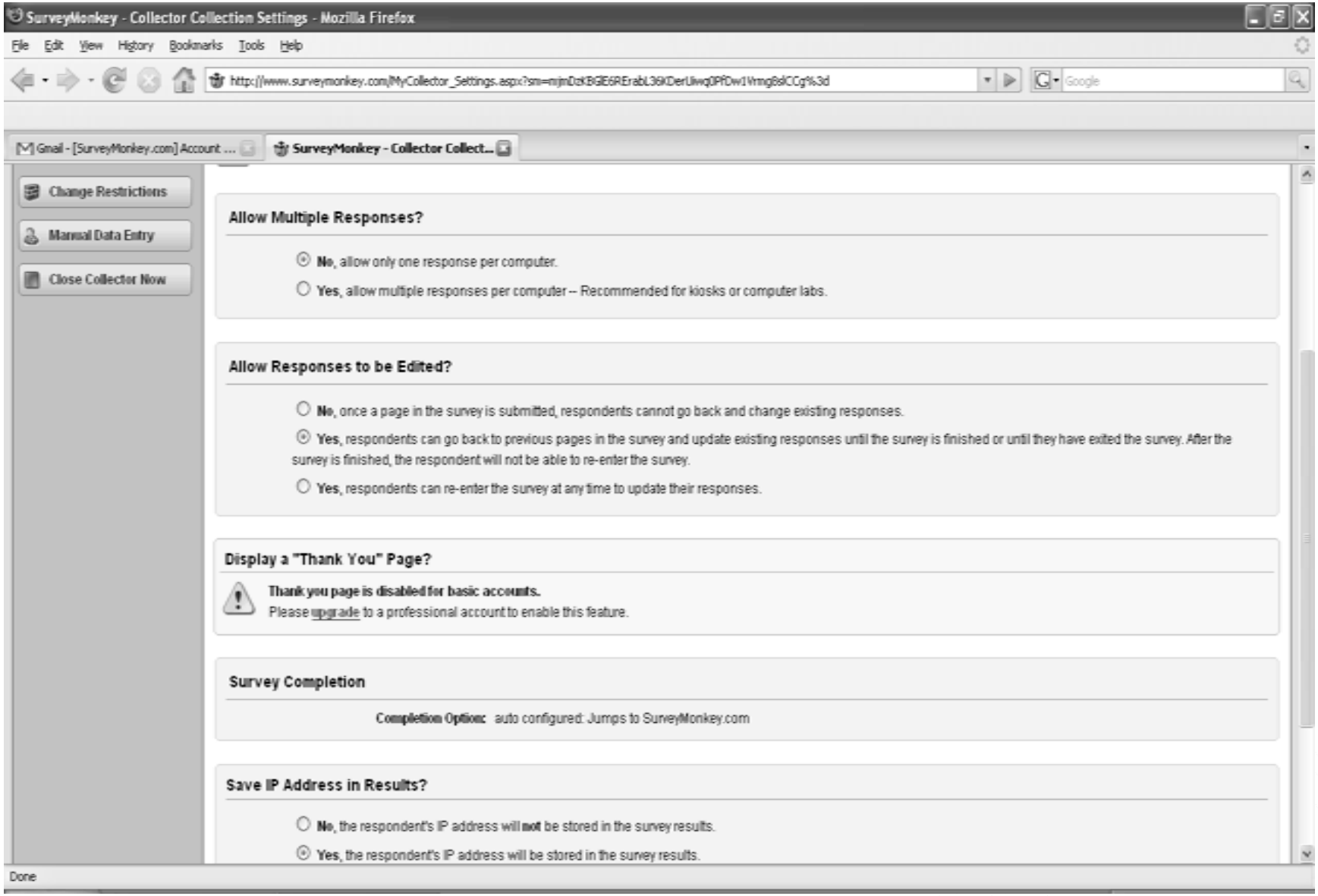
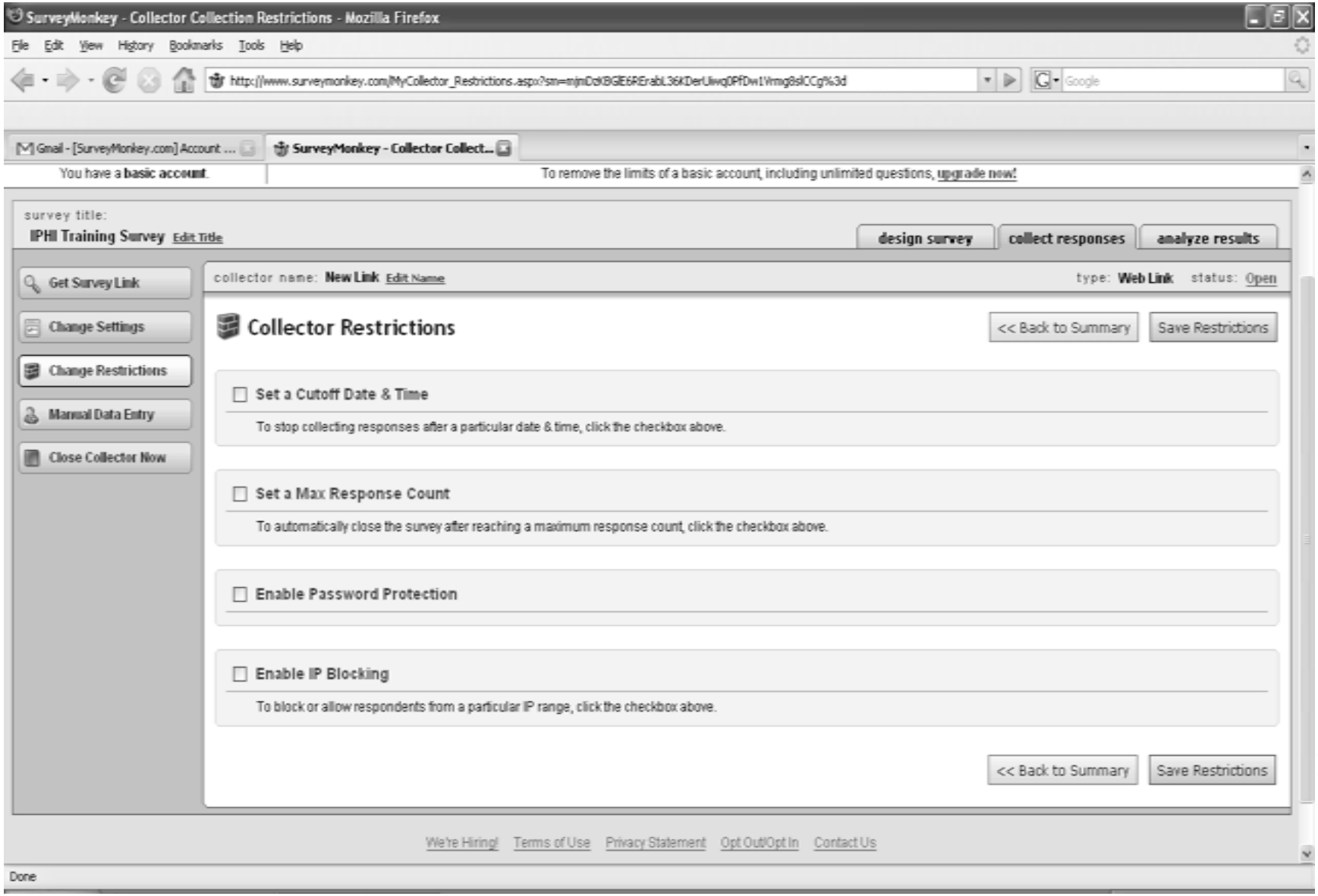
File Edit View History Bookmarks Tools Help
http://www.surveymonkey.com/MySurvey_Settings.aspx?sm=wdSne1O0zBmW4KRgcJnutTyc7G8wvfFRBjYn6WgyskS%3d
Gmail - [SurveyMonkey.com] Account ...
SurveyMonkey - Survey Settings
Survey/Page Titles
Show Survey Title in Actual Survey
Show Page Titles in Actual Survey
Navigation Buttons
Previous Button: Prev
Next Button: Next
Done Button: Done
Exit Link: Exit this survey
Show Exit Link
Required Question Highlight
Use asterisk (*) to highlight required questions
Do not highlight required questions
<< Back to Survey
Save Changes
We're Hiring! Terms of Use Privacy Statement Opt Out/Opt In Contact Us
Copyright ©1999-2008 SurveyMonkey.com. All Rights Reserved. No portion of this site may be copied without the express written consent of SurveyMonkey.com.
Done


SurveyMonkey - Collection Wizard - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://www.surveymonkey.com/MyCollector_Wizard.aspx?sm=wd5ne1O0zBmW4KRgc3nukTyc7G8wvfFRIjYr6WgyskS%3d
Gmail - [SurveyMonkey.com] Account ...
SurveyMonkey - Collection Wizard
Home
Create Survey
My Surveys
Address Book
My Account
Help Center
You have a basic account.
To remove the limits of a basic account, including unlimited questions, upgrade now!
survey title:
IPHI Training Survey
Edit Title
design survey
collect responses
analyze results
Collect Responses for "IPHI Training Survey"
Next Step >>
Select the method you would like to use to collect responses. We refer to the method that you use to collect responses as a "collector". While most people use only a single collector, you may want to use multiple collectors if you are sending your survey to different groups of people. Each collector can have its own unique settings and restrictions, and can be closed and opened independently. For more information about collectors, visit the help center.
How Would You Like to Collect Responses?
Create a link to send in your own email message or to place on a webpage
The simplest and fastest way to collect responses. We generate a link for your survey that you can just copy and paste.
Upload your own emails and have us send a survey invitation
You can upload your emails, and we will send a survey invitation on your behalf. You can customize the message that is sent, and track who responds in your list.
Create a popup invitation for your webpage
We give you the code to generate a popup invitation on your own webpage.
Enter a Name for this Link:
Name:
New Link
(max 100 characters)
Next Step >>
Done


SurveyMonkey - Collector Collection Settings - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://www.surveymonkey.com/MyCollector_Settings.aspx?sm=mjmDdKBGlE6RErabL36KDerUiwq0PfDw1Vmg8slCCg%3d
Google
Gmail - [SurveyMonkey.com] Account ...
SurveyMonkey - Collector Collect...
Change Restrictions
Manual Data Entry
Close Collector Now
Allow Multiple Responses?
No, allow only one response per computer.
Yes, allow multiple responses per computer -- Recommended for kiosks or computer labs.
Allow Responses to be Edited?
No, once a page in the survey is submitted, respondents cannot go back and change existing responses.
Yes, respondents can go back to previous pages in the survey and update existing responses until the survey is finished or until they have exited the survey. After the survey is finished, the respondent will not be able to re-enter the survey.
Yes, respondents can re-enter the survey at any time to update their responses.
Display a "Thank You" Page?
Thank you page is disabled for basic accounts.
Please upgrade to a professional account to enable this feature.
Survey Completion
Completion Options: auto configured: Jumps to SurveyMonkey.com
Save IP Address in Results?
No, the respondent's IP address will not be stored in the survey results.
Yes, the respondent's IP address will be stored in the survey results.
Done


SurveyMonkey - Collector Collection Restrictions - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://www.surveymonkey.com/MyCollector_Restrictions.aspx?sm=mjmDdKBGlE6RErabL36KDerUiwq0PfDw1Vmg8slCCg%3d
Gmail - [SurveyMonkey.com] Account ...
SurveyMonkey - Collector Collect...
You have a basic account.
To remove the limits of a basic account, including unlimited questions, upgrade now!
survey title:
IPHI Training Survey Edit Title
design survey
collect responses
analyze results
Get Survey Link
Change Settings
Change Restrictions
Manual Data Entry
Close Collector Now
collector name: New Link Edit Name
type: Web Link status: Open
Collector Restrictions
<< Back to Summary
Save Restrictions
Set a Cutoff Date & Time
To stop collecting responses after a particular date & time, click the checkbox above.
Set a Max Response Count
To automatically close the survey after reaching a maximum response count, click the checkbox above.
Enable Password Protection
Enable IP Blocking
To block or allow respondents from a particular IP range, click the checkbox above.
<< Back to Summary
Save Restrictions
We're Hiring! Terms of Use Privacy Statement Opt Out/Opt In Contact Us
Done

Online Resources:

- www.communitydevelopment.uiuc.edu/commsurvey
- www.whatisasurvey.info/
- www.managementhelp.org/evaluatn/questnrs.htm
- www.statpac.com/surveys/
- writing.colostate.edu/guides/research/survey/index.cfm
- members.tripod.com/~frede_dast/conseil1_a.html

All links will be provided on the IPHI web-site.

Feedback

- Your feedback is VERY important. Please complete the online evaluation survey. The link was provided in your confirmation email and can be found on the next slide.
- If you registered for a group, please ask all participants to complete the evaluation also.
- We will use this information to plan future sessions and continually improve.

Evaluation Link

http://www.surveymonkey.com/s.aspx?sm=51aXqtg0NwQy_2fzasY2sP_2bA_3d_3d

Question and Answer Session

- Please join us now for a LIVE Q & A session with the presenter:
  - Dial 1(877) 411-9748
  - Enter the access code: 3467868#
  - Mute your phone (*6 to mute or un-mute).
- If you have a question that is not addressed on the call, please email the question to laurie.call@iphionline.org.

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