Designing Effective Questions
Workshop Goals

To learn the basics of survey development, including:

1. Construct questions to capture valid and reliable data
2. Choose between different types of questions and suitable response options
3. How to build a questionnaire
Creating your survey instrument can happen after your evaluation is planned, however, your survey strategies should always be considered in planning for your evaluation.

Factors to consider and balance:
- Most appropriate strategies
- The costs of data collection
- Access to resources and respondents
- Adherence to standards, especially those associated with privacy
Surveys

- What types of information do surveys capture?
  - Attributes
  - Behavior
  - Attitudes
From idea to survey

Construct
- idea, schema, model, phenomenon

Operationalize
- turn the immeasurable into something measurable

Survey Questionnaire
- a tool that uses questions to measure a construct
Reliability refers to how consistently a question measures a concept.

- Internal
- Test-retest
Validity refers to whether or not the survey instrument really measures the concept you intend to measure.

- **Face**
- **Content**
- **Criterion**
- **Construct**
Existing surveys

- You can use questions from existing surveys for your own survey, but be sure to consider:
  - Does the measure seem to be doing what it says it does?
  - How close a fit is there between the objectives of the measure and your program product objectives?
  - Is it reliable?
  - Is it appropriate for the age and ability level of the audience?
### Anatomy of a question

#### Question
How many hours, if any, do you plan to edit Wikipedia in the next week?

#### Response options
- None
- Less than 2 hours
- 2 to 5 hours
- 6 to 10 hours
- 11 or more hours

*The other half of writing a question is choosing a good response option!"
Question Construction
Objective: To measure a person’s participation level in a series of edit-a-thons held during the month of March 2013.

Poor: Did you attend the March edit-a-thon series regularly?

Better: Which, if any, of the March edit-a-thon series did you participate in? Choose all that apply:
**Objective** To understand editor’s motivation to edit.

**Poor**
Do you agree or disagree that, given any personal circumstances, your motivation for editing Wikipedia increased in the last year, where motivation means you have actually made enough edits that you feel are satisfactory for someone with your education level and available time.

**Better**
To what extent has your motivation for editing Wikipedia increased or decreased over the last year?
## Avoid Double Negatives

### Objective
To measure a person’s support for a recurring edit-a-thon.

<table>
<thead>
<tr>
<th>Poor</th>
<th>Better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you disagree that the weekly edit-a-thon at the local library should not be continued?</td>
<td>To what extent do you agree or disagree with the following statement: <em>The weekly edit-a-thon at the public library should</em> continue.</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
<td>To learn whether an editor voted in the 2012 Photo of the Year contest.</td>
</tr>
</tbody>
</table>

| **Poor** | Did you vote in the 2012 Photo of the Year contest last year? |

| **Better** | There are many reasons a contributor to Commons may not be able to vote in a Photo of the Year contest such as not having made enough contributions or missing the voting period. Thinking about the Photo of the Year contest of 2012, do you remember if you voted? |
Avoid double-barreled questions

**Objective**
To know the experience level of participants who attended an editing workshop.

**Poor**
Have you ever edited Wikipedia and Commons before this workshop?

**Better**
- Have you ever edited Wikipedia?
- Have you ever uploaded a photo to Wikimedia Commons?
- Have you ever edited Wikimedia Commons?
Avoid abbreviations, jargon, slang

**Objective**  To evaluate a new participant’s intention to contribute to Wiki Loves Monuments in the future.

**Poor**  How likely is it that you will upload photos for the WLM contest next year?

**Better**  How likely is it that you will upload photos for Wiki Loves Monuments 2014?
Avoid leading questions

**Objective**: To assess participant expectations for providing laptops as resources during editing workshop.

**Poor**: Don’t you agree that laptops should be available for use at every editing workshop?

**Better**: How important is it for workshops to have a few laptops available for participants who do not have one?
Avoid loaded questions

Objective
To assess support for travel expense reimbursement for Wikimania Conference presenters.

Poor
Are you in favor of reasonable reimbursements for travel expenses to Wikimania for generous conference presenters, who take time out of their schedules to attend?

Better
To what extent do you feel that Wikimania conference presenters should be eligible to have their travel expenses reimbursed?
Objective: Learning new users intentions for future editing, in terms of which projects they might become active on.

**Poor**
Which project(s) do you plan on editing in the near future?

**Better**
Which Wikimedia project(s) (i.e. English Wikipedia, German Wikipedia) do you plan on editing within the next two weeks?
### Objective
To understand participant learning experiences during an editing workshop.

<table>
<thead>
<tr>
<th>Poor</th>
<th>Please describe your experience during the editing workshop.</th>
</tr>
</thead>
</table>
| Better | To what extent do you agree or disagree with the following statements:  
- I understand the mission of Wikimedia.  
- I understand how I can edit an article.  
- I understand how to upload a photo to Commons.  
- I understand how to add an image to an article. |
Rely on second-hand data sparingly

<table>
<thead>
<tr>
<th>Objective</th>
<th>To find out what participants learned from participating in conference workshops.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>Survey workshop leaders to ask questions around their learning objectives and participant comprehension of the material.</td>
</tr>
<tr>
<td>Better</td>
<td>Survey conference participants to ask questions about their understanding of specific workshop learning objectives.</td>
</tr>
</tbody>
</table>
## Ask personal questions with caution

<table>
<thead>
<tr>
<th><strong>Objective</strong></th>
<th>To learn the income level of participants.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Poor</strong></td>
<td>How much do you earn each year?___________</td>
</tr>
<tr>
<td><strong>Better</strong></td>
<td>In which of the following categories does your last year’s annual income best fit?</td>
</tr>
<tr>
<td></td>
<td>Below $10,000</td>
</tr>
<tr>
<td></td>
<td>$10,000 - $19,999</td>
</tr>
<tr>
<td></td>
<td>$20,000 - $29,999</td>
</tr>
<tr>
<td></td>
<td>etc...</td>
</tr>
</tbody>
</table>
Response Options
Question Types

Structured (Fixed Response)

“Which of the following conferences did you attend? (check all that apply)"

Non-structured (Open-ended)

“Please provide any additional comments about your experience at the conference”
Fill-in-the-blank questions are useful for obtaining key demographic information.

- What is your username? _________________
- In what city do you live? _________________
- What was your age on your last birthday? ____
- How many edits, if any, have you made to the French Wikipedia? ____________
**Dichotomous pairs**

Responses often include:

- Yes/No
- True/False
- Support/Oppose

- Popular, but have many problems
- They are very limiting
- Best used for directing individuals to a different part of a survey
Our chapter began implementing Wiki Takes programs in 2011. In what year did you first participate in a Wiki Takes program?

a) 2011
b) 2012
c) 2013

Useful if you would like to have respondents select from known alternatives.
Check all the apply

Which Wikimedia chapter program events did you attend over the last year:

1) None
2) Edit-a-thons
3) Trainings
4) Museum tours
5) Workshop
6) Other (*please specify*) _______________________

- Very useful when well-stated
- Be sure to provide several choices, including OTHER (*please specify*).
- Does not allow measurement of relative importance, rather, overall importance of your participant group
Please rank the following workshop topics in terms of your interest. Put a “1” next to the one that you’d like to attend the most, a “2” next to the one you next prefer, and so on. No two numbers should be the same.

a) ___ Wikipedia article format  
b) ___ Using templates  
c) ___ Working with photos, etc.  
d) ___ WP Manual of Style  
e) ___ Collaborating constructively with other editors

- Can work if directions are clear  
- Allows for assessment of relative importance  
- Can be a problem when there are more than 7 items
Scales

To what extent do you agree or disagree with the following statement:

The weekly edit-a-thon at the public library should continue.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

- Many types of scales!: Likert scales (demonstrated above), guttman scales, and semantic differential are most common.
- Very important to choose proper wording for response options.
Choosing response options

When choosing response options, make sure that they are:

- Exhaustive
- Mutually Exclusive
- Relevant to the question
- Consistent
Tips for your questionnaire

- Include only questions relevant to the survey's purpose and which will be useful for analysis
- Make the questionnaire appealing
- Keep it short but include what is necessary
- Limit use of open-ended questions
- Ensure anonymity and confidentiality
- Avoid questions that look or seem alike
Question order matters

- Natural Time Sequence
- Most familiar to least familiar
- Sensitive questions later
- Easy questions last
- Open-ended questions near the end

Common Question Order
1. Introduction
2. Participation
3. Knowledge
4. Opinions/attitudes
5. Recommendations
6. Demographics
7. Thank you
Additional Resources

**Designing Effectives Questions Learning Module**
https://meta.wikimedia.org/wiki/Programs:Evaluation_portal/Learning_modules/3Welcome

http://www.drcath.net/toolkit/survey.html
http://www.mad.state.mn.us/survey-guide
http://owl.english.purdue.edu/owl/resource/559/06/
Question Writing Activity