



Program Development & Evaluation Cooperative Extension http://www.uwex.edu/ces/ pdande/

# Quick Tips

# **Quick Tips**

## **Collecting Group Data: Delphi Technique**

The island of Delphi was the hallowed site of the most revered oracle in ancient Greece. Legend has it that Apollo was the master of Delphi. Apollo was famous throughout Greece for his ability to foresee the future. Those who consulted the oracle brought gifts, thereby making Delphi one of the richest and most influential locales in Greece.

The Delphi technique was established in 1953 to gain the perspectives of military officers regarding the amount of bombs needed in case of war. Since then it has been used and adapted to address a variety of complex future-oriented questions. It is an iterative process that involves mailing repeated rounds of questionnaires to a selected group of respondents, considered to be experts in a given subject matter area. Responses to one round are summarized and developed into the next round questionnaire that seeks agreement, disagreement and insights. The mailed Delphi can be adapted for people meeting in a group or for electronic groups (see Witkin and Auschuld, 1995).

The Delphi technique is used to:

- Solicit expert opinion on a particular subject.
- Provide group interaction without a face-to-face meeting.
- Avoid direct confrontation of people with opposing views.

#### **Preparation**

Careful selection of participants is important since the quality and accuracy of responses to a Delphi are only as good as the expert quality of the participants who are involved in the process. The number of participants depends upon the purpose of the Delphi and the diversity of the targeted population. Ten to 15 people may be adequate for a focused Delphi where participants do not vary a great deal. In other cases, several hundred participants may be appropriate. The questionnaires need to be carefully constructed and the rounds orchestrated with a clear purpose in mind.

#### **Procedures**

- 1. Form a team to undertake and monitor the Delphi.
- 2. Identify the participants. Customarily, participants are experts in the subject area. However, lay persons with a vested interest in the topic are also frequently included. For instance, given the purpose of countywide planning, representation from the various user and non-user groups across the county would be appropriate.
- 3. Contact Delphi participants and solicit their participation. Clearly state the purpose of the Delphi, how results will be used and the procedures. Participant cooperation and continued involvement over the course of the Delphi are critical so this step is very important. Consider a written letter to each participant followed by a telephone call.
- 4. Develop the first-round Delphi questionnaire. Pre-test the questionnaire for proper wording (e.g., ambiguities, vagueness).

### Quick Tips 4 - Collecting Group Data: Delphi Technique continued

- 5. Send the first questionnaire to participants and collect returns. Code response forms to keep track of returns though individual responses remain confidential and results are reported anonymously.
- 6. Analyze the first-round responses.
- 7. Prepare the second-round questionnaire (and possible testing).
- 8. Transmit the second-round questionnaires to the participants. Collect returns.
- 9. Analyze second-round responses. Number of rounds may range from two to four.
- 10. Prepare report and share with participants.

#### References:

Delbecq, A., Van de Ven, A., & Gustafson, D. (1975). *Group Techniques for Program Planning: A Guide to Nominal Group and Delphi Processes*. Glenview, IL: Scott, Foresman and Company.

Johnson, D., Meiller, L., Miller, L., & Summers, G. (1987). *Needs Assessment: Theory and Methods*. Ames, IA: lowa State University Press.

Witkin, B., & Altschuld, J. (1995). *Planning and Conducting Needs Assessment: A Practical Guide*. Thousands Oaks, CA: Sage Publications.

### Sample Personal Contact to Recruit Delphi Participant

Hello. This is from	
The County Cooperative Extension Office is beginning a long-range planning effort to ensure our effectiveness in meeting changing needs in the county. This is part of a statewide process to guide the University of Wisconsin-Extension's direction and allocation of resources.	r
As part of this effort, we are asking people like you who know the county to help identify the needs, concerns and assets of County. You have been nominated to represent the county's interests in this process. Your input will help charter the future of our county. Your participation will involve responding to two different questionnaires. This will take no more than one hour of your time in total. You can either receive the question naire by mail or we can arrange a telephone interview or a time to meet. We expect to be finished with the whole process by when you will receive a report of the results.	
Would you be willing to participate? (If yes, find out whether the person wishes to receive the questionnaire by mail, telephone or in person.)	
Do you have any questions?	
We'll be sending a letter with further explanation in a few days.	
Thank you.	
Sample Letter of Introduction for Delphi  Date	
Dear;	
Thank you for your willingness to participate in the County Extension Service planning process.	
You are one of individuals in the county being asked to help identify the concerns, needs and assets County. You will receive two separate mailings that focus on three central questions:	of
<ul> <li>What are current needs and concerns in the county?</li> <li>What assets do we have?</li> <li>What would you like the county to be like in the future?</li> </ul>	
Responses from the first questionnaire will be summarized to form the basis of the second questionnaire.	
We expect that your involvement in this process will take no more than one hour of your time. We hope to hat the results compiled by when you can expect to receive the results. Your volunteer commitment ad greatly to the identification of issues facing people in our county and throughout the state.	
Should you have any questions, please contact me at We thank you for your interest and participations.	oation.
Sincerely,	

County Office Department Head, Chairperson of Oversight Committee

### Sample Letter to Accompany First Questionnaire

Date
Dear;
Thank you for your response to the first questionnaire and for your commitment to the Extension planning process. Your continued participation is critical. As we indicated in the beginning, this process involves a series of two questionnaires. Enclosed is the second questionnaire based on what you and the other respondents provided on the first questionnaire. We now need you to rank order the items to clarify their importance for county residents.
Please return your questionnaire in the self-addressed stamped envelope by We expect to analyze the information and feedback the results to you by
Sincerely,
County Office Department Head, Chairperson of Oversight Committee
Sample Letter to Accompany Second Questionnaire
Date
Dear;
Enclosed please find the first questionnaire for our Extension program planning effort. You are one of a small number of people providing their input so your response is vital. If you have any questions, please contact me at
We would like the enclosed questionnaire returned to use by A self-addressed, stamped envelope is enclosed for your convenience.
Sincerely,
County Office Department Head, Chairperson of Oversight Committee