

**Comments on Q-Bank Papers**  
**American Statistical Association Meetings**  
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We have heard 3 excellent papers about an exciting new development—the establishment, not just of a question data base, but of a tested-question database. Since the papers are all about aspects of the same database and are by members of the interagency group that has been developing the database, I will not discuss each paper separately but, rather, treat them as a seamless whole.

First, let me congratulate the authors and their co-workers for undertaking an innovative task that will, if it is successfully institutionalized, will be an important tool for those developing questionnaires and for methodological research on questionnaire construction. This is a really remarkable feat, remarkable in many ways. First, it arose from the perceived need for such a database by those who are actively engaged in question testing for statistical agencies. No one assigned them the task. No one put in a budget item that had to be approved by layers of bureaucracy before they could start. They just saw the need and started doing it. It is a veritable Field of Dreams. That is a rare thing in any organization.

Second, they branched out from the origins in NCHS and actively engaged their counterparts in other agencies. From my brief stint in a government agency, I know how difficult it is to get active, real cooperation between agencies. If the cooperation depended on getting formal approval for joint work, we would not be here today. Instead everyone would be waiting for formal memoranda of understanding to wend their way through the system. I can't tell you how impressed I am that the group got together and started working together to do the necessary work in developing the database.

Third, it has expanded to take into account other kinds of questionnaires than those originally planned for, notably self-administered and institutional questionnaires. This required a lot of extra work and accommodation of the coding system. It would have been simpler just to tell those interested in these kinds of studies to go off and develop their own database. But they did not, and have worked very diligently, and it appears successfully, to overcome the difficulties posed by these types of questionnaires. Those of us who are concerned with improving the quality of questionnaires owe them all a debt of gratitude.

I have had experience myself with several attempts at constructing and maintaining databases of questions, one successful and one unsuccessful. From these experiences I have formulated a few generalizations about what is conducive to success and what is pat to cause them to breakdown. While Q-Bank appears to be over the first big hurdle, namely getting it designed, it still has several hurdles to get over before we can relax and enjoy the fruits of their labors.

The successful system is an extremely simple system, using low level technology and begun before computers were common. It was developed by the Allensbach Institute in

Germany, a firm that does public opinion polling. I encountered it when I spent a sabbatical year in Germany in 1971 and visited Allensbach many times. The system, which had been started many years before, is simplicity itself. It consists of a vertical display of questions that have been used in Allensbach surveys. The display has the text of the question and the numbers of the all the studies of in which the question was asked. The question text is put there by the simple device of cutting up a paper questionnaire and inserting the question, if it is a new question, in a plastic sleeve. The display is organized by major topics much as Q-Bank questions are coded for topic.

The power of the system comes from the cross-referencing to the surveys in which the questions were asked. The code books for the surveys were located near to the question display and one could readily find the frequency distributions for the question in different survey, the results of split ballot experiments in which either the order or alternative wordings of the question had been tested experimentally, and any other relevant information about the functioning of the question. It was a simple and primitive version of what Q-Bank is trying to do.

Although simple, the system was extremely useful. It has allowed the Institute, almost uniquely in my experience, to use the same question with the same wording in surveys over the years so that they have developed a time series of questions about perennial topics of interest. Because they routinely test question wording and context experimentally using split ballots, they have built up a great archive of information about response effects from question wording and order. It has enabled the Institute to learn systematically from its own experience.

My second experience was trying to build a similar but more sophisticated system at NORC. NORC, like most other survey organizations, has no systematic library of questions and we were constantly changing questions on the same topic in different surveys. We behaved liked Kristin's description of the staff at the Question Design Research Laboratory that gave rise to the idea of Q-Bank. There was widespread recognition in the organization that such a system was needed, and we set to work to build it. Two year later, after extensive system design work and a few prototypes, the development had bogged down, and we abandoned the effort.

What did I learn from these two experiences that is useful for the development of Q-Bank.

I see some of the characteristics of the successful effort in what has already happened, and some cautions that I want to share with you.

First, the successful system was simple, while the NORC system became more and more complex as it went along because people kept adding to the desired functionalities until it collapsed under its own weight. We wanted a system that not only indexed questions by topic and formats but also seamlessly went to all the study materials, metadata and study data with minimal human intervention. I am delighted to see that the developers of Q-Bank recognize the virtues of simplicity and keep reminding themselves that not to get too complex.

Second, the Allensbach Institute had a specialized department for questionnaire construction, in some way similar to the QDRL, but less sophisticated (this was long before cognitive interviewing had been invented). NORC had no such specialized department. Questionnaire development was dispersed in the different topical departments. The survey methodologists were separated from the survey designers and had not continuing operational responsibility for questionnaire design. This meant that there was no one responsible to testing out questions across studies so that their work would be immediately simplified by the existence of a question data base. Thus no one or group had an incentive to develop the system as part of their own work. It was treated as a separate project, a common good, but not one that was useful to them everyday. The existence of a specialized question research group in different agencies enables the development of the Q-Bank.

Finally, the long term maintenance of the Allensbach system was due not only to the structural fact that there was a questionnaire design group, but as important, there was a commitment to the system by the Institute leadership. Keeping the database up to date was expensive. Allensbach has a full-time data librarian who made sure that the database was kept up to date. It was valued as part of the technical expertise of the organization that gave it a competitive advantage over other public opinion institutes in Germany. NORC was not able to devote the resources to continue with its development, nor even to keep a simpler system going because of the peculiarities of what is an allowable cost on government contracts. For the long-term success of such a system, substantial and sustained funding is necessary.

So, the three elements that I believe are essential are simplicity in system design, a permanent group whose job it is to test our questions, and sustained funding. From the papers we have heard today, it looks as if the first two are firmly in place, although I worry a bit about keeping it simple. Paul Beatty indicated in his paper that “There is a danger of creating an elegant set of codes that simply require too much time for researchers to use.” It is very important that this danger be avoided.

We did not hear much about the third, which worries me more. How do you plan to finance making it operational and keep it up to date? If I understand the situation so far, the major costs have been the time of various members of the working group from the different cooperating agencies. This is relatively easy to accomplish because it does not involve any money moving across agencies. But if some agency, presumably NCHS, is going to take on the job of making it available on the web and updating it, there will be costs that the primary agency will not want to bear by itself, unless they are wealthier and more altruistic than I suspect they are.

There was reference to agencies who want to participate buying-in. Will this happen? Will it happen in time to keep the momentum going? I worry that this is a bit of the problem of the commons. It is to everyone's advantage to have the Q-Bank operational, but the people who benefit and realize the cost savings may not be the people who have

to pay the costs. This is a classic problem in budgeting. I hope someone is giving hard thought to how to make it happen.

I would like to end with a question about the future of Q-Bank. Who is going to do the updating? It looks as if you are expecting individual researchers in the different agencies who have tested question to input the new data. But what about coding reliability? Is one person or group going to be doing enough new testing to input new material frequently enough to keep current on coding expertise. How are you going to maintain quality control if there are many different people inputting data? This is a maintenance problem that I hope you will give a lot of thought too.

This is an exciting and valuable project, and you are to be congratulated on the incredible progress you have made. I hope that the project continues to thrive and you successfully overcome these remaining hurdles to final deployment and, even more important, it successful use and maintenance.