

SUPPORTING STATEMENT FOR PAPERWORK REDUCTION SUBMISSION

(3145-0157)

Usability Testing of Topic-Based Navigation for the www.nsf.gov/statistics/ Website.

A. JUSTIFICATION

1. CIRCUMSTANCES MAKING COLLECTION OF INFORMATION

NECESSARY

On September 11, 1993, President Clinton issued Executive Order 12862, “Setting Customer Service Standards,” which clearly defined his vision that the Federal agencies will put the public first. To accomplish this, President Clinton called for a “revolution within the Federal government to change the way it does business.” He expected this process to require continual reform of government practices and operations to the end that, “when dealing with the Federal agencies, all people receive service that matches or exceeds the best service available in the private sector.”

Section 1(b) of this E.O. requires agencies to “survey customers to determine the kind and quality of services they want and their level of satisfaction with existing services” and Section 1(a) requires agencies to “survey front- line employees on barriers to, and ideas for, matching the best in business.” These Presidential requirements established an ongoing need for the National Science Foundation (NSF) to engage in an interactive process of collecting information and using it to improve program services and processes.

NCSES develops and maintains a website (www.nsf.gov/statistics/) to provide a gateway to data and information on the U.S. science and engineering enterprise. The site is a complex website containing large amounts of data and publications.

NCSES is embarking on a redesign of its website to make its content more available to users. The purpose of the redesign is to make the site more intuitive and easier to navigate.

2. HOW, BY WHOM, AND PURPOSE FOR WHICH INFORMATION IS TO BE USED

A previous usability test has helped to identify several issues with the NCSES website and highlighted problems users have experienced with the current topic/subtopic navigation. As part of this website redesign effort to increase user satisfaction, NCSES is evaluating current usage and future needs of data users. This clearance request is directed at gathering information from both users and non-users of the NCSES website using a card sort methodology.

The results of this small, qualitative study will help NCSES to understand:

1. Content that participants have not understood well
2. Content that could belong to more than one area

3. Alternative paths to content
4. How different participants see information

The results will be used to inform direction of future changes to the NCSES website.

3. USE OF AUTOMATION

A web-based card-sorting application will be used.

4. EFFORTS TO IDENTIFY DUPLICATION

Not applicable.

5. SMALL BUSINESS CONSIDERATIONS

Not applicable.

6. CONSEQUENCES OF LESS FREQUENT COLLECTION

Not applicable.

7. SPECIAL CIRCUMSTANCES FOR COLLECTION

Not applicable.

8. FEDERAL REGISTER NOTICE

The agency's notice, as required by 5 CFR 1320.8(d), was published in the *Federal Register* on January 12, 2011, at 76 FR 2151 and no substantive comments were received.

9. OUTSIDE CONSULTATION

Joe Natoli (TwoFold Works, inc.) will be the consultant performing the card sorting activities. SRI International will handle the participant recruitment.

10. GIFTS OR REMUNERATION

Not applicable.

11. CONFIDENTIALITY PROVIDED TO RESPONDENTS

No personal information will be collected from participants and none will be documented in any project deliverables. Information will be used for internal purposes only to revise the topic-based navigation on the website.

12. QUESTIONS OF A SENSITIVE NATURE

No questions of a sensitive nature will be asked.

13. ESTIMATE OF BURDEN

Category of Respondent	No. of Respondents	Participation Time	Burden
Card sorting exercises (2 rounds of 20 respondents)	40	3 hours	120 hours
Recruitment	200	10 minutes	34 hours
Totals			154 hours

14. COST TO RESPONDENTS

None

15. CAPITAL/STARTUP COSTS

Not applicable.

TOTAL COST TO THE FEDERAL GOVERNMENT

The estimated one-time cost to the Federal government is \$30,000.

16. CHANGES IN BURDEN

There are no changes in burden. This proposed collection fits within the limits of our generic clearance.

18. PUBLICATION OF COLLECTION

Not applicable.

19. SEEKING APPROVAL TO NOT DISPLAY OMB EXPIRATION DATE

Not applicable.

20. EXCEPTION(S) TO THE CERTIFICATION STATEMENT (19) ON OMB 83-I

There are no exceptions.

B. STATISTICAL METHODS

B.1. Universe and Sampling Procedures

Because this is a qualitative study, we do not intend to design a sample that would allow us to make statistical estimates. NCSES plans to recruit volunteers for the card sort sessions from a variety of groups to include, but not be limited to: policy officials and their staff (e.g. Office of Science and Technology Policy); academic researchers (e.g. members of the Association for Institutional Research); members of the press, professional associations (e.g. American Chemical Society); elementary teachers and students; and the general public. Internal NCSES staff and NSF staff will be used to supplement the available pool of participants.

Wherever possible, NCSES and its contractor, SRI International, will recruit appropriate individuals through their own professional contacts in the various sectors. One source of participants from academia, industry, professional associations, and the federal government, including both users and non-users of NCSES data, will be the three expert panels that provide guidance to NCSES on its surveys; SRI organizes their meetings and is the primary liaison with panel members. Participants from the Office of Science and Technology, the Commission on Professionals in Science and Technology, and some of the professional associations can be drawn from staff or membership lists on their websites. For those membership groups that do not allow public access to members' names, SRI will use the general contact information provided on their websites to call or email them to obtain an appropriate contact for recruiting participants. NCSES will identify the NSF staff to be recruited.

B.2. Survey Methodology

NCSES plans to conduct two (2) Card Sort sessions with a group of approximately 20 volunteer participants in each session. No personal information will be collected from participants and none will be documented in any project deliverables. Information will be used for internal purposes only to revise the topic-based navigation on the website.

The first session is an **Open Card Sort**, typically a 3-hour session. A set of 20 participants will be given index cards showing site content with no pre-established groupings. They will be asked to sort the cards into groups that they feel are appropriate and then describe each group. Open Card Sorting is useful in finding out what structures are easiest for users to navigate.

The second session is a **Closed Card Sort**, also lasting approximately 3 hours. A second set of 20 participants will be given index cards showing site content with a pre-established set of primary groups. They will be asked to place cards into these groups. Closed Card Sorting is useful for testing user satisfaction with proposed website navigation structures.

B.3. Methods to Maximize Response

The activity will be conducted online with a moderator available via chat window for assistance. The online nature of the activity will work to maximize response by allowing greater flexibility for the participants and eliminating expenses related to transportation to a testing facility.

B.4. Testing of Procedures

This activity is using a standard method for card sorting, so we are not testing the procedures.

B.5. Contacts for Statistical Aspects of Data Collection

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Attachments