Is it Research involving Human Subjects? Four Case Studies

Instructions:

- 1. Read the cases.
- 2. Using the two Federal Research Decision charts determine whether the proposed study would constitute "research on human subjects" or whether it would be exempt
- 3. Try to call out which aspects of the study seem to fit the criteria for research and which do not.

Case 1 – Videotaping at the zoo

<u>Goals</u>: Evaluate whether a set of new labels effectively changes visitors' behavior, increasing the number of attributes they notice, describe and point to when looking at an animal.

Method: In order to assess visitors' responses to new labels, evaluators will audio/videotape visitors at four different animal stations in the zoo (two with the new labels and two with the old labels). At each station, a camera will be placed on a tripod near the label, and microphones will be placed on the label itself. After collecting the video, evaluators will count the total number of animal attributes noticed by each visitor, including those mentioned verbally, and those described by a gesture like pointing.

<u>Interaction</u>: There will be no interaction between the researcher and the visitors, but visitors can see the camera and microphones.

<u>Dissemination plan</u>: The purpose of the study is to inform zoo staff, so the study will be disseminated internally. However, if the results are interesting, the study might be submitted for publication as a pilot study of the effectiveness of such labels.

Case 2 – Interviewing in the aquarium

<u>Goals</u>: The aquarium is going to embark on the creation of a new whale exhibition. The goal of this front-end study is to assess visitors' prior knowledge about whales (and gaps in that knowledge), their desires for learning more about whales, and their expectations for what might be included in a whale exhibition.

<u>Method</u>: Aquarium visitors will be randomly selected as they enter the main hall, and recruited to participate in a 10 minute interview. If they agree to be interviewed, an evaluator will interview them immediately. Interview questions will include demographic questions (e.g., age, gender, ethnicity, zip code) and questions about whales and whale exhibitions.

<u>Interaction</u>: The evaluator will talk with visitors during recruitment and during the interview.

<u>Dissemination plan</u>: The purpose of the study is to inform aquarium staff, so the study will be reported internally. However, if colleagues at other aquaria are interested in the results, the evaluator will send them the report.

Case 3 – Tracking website usage for a science radio program

<u>Goals</u>: A national science radio program has an affiliated website. The staff would like to better understand how programming affects website usage. Do listeners go to the website after a broadcast? If so, why – what kind of information are the looking for? What kinds of information would they like the website to provide that it is not offering already?

Methods: There are two parts to the study. (1) Collect clickstream data of visitors to the radio program's website, and analyze webpage usage with respect to radio programming. (For example, which pages are viewed after a broadcast? Are there particular times of day when viewing surges? Which links are accessed, and how is that related to the programming?) Internet Protocol (IP) addresses will be collected as part of the study to better understand geographic locations of the visitors to the website. (2) Recruit visitors to fill out a survey after visiting the site. Survey questions include demographic questions (e.g., age, gender, ethnicity, zip code) and questions about the information sought and found on the website.

<u>Interaction</u>: The evaluator has no direct interaction with the website visitor, but the survey is written as if the evaluator speaking directly to the reader.

<u>Dissemination plan</u>: The report will be reported internally. However, if colleagues at other radio programs are interested in the results, the evaluator will send them the report.

Case 4 – Summative evaluation of a museum exhibition

<u>Goal</u>: To determine the degree to which a museum exhibition on the Mind reached its goals. Specifically, did visitors spend more time in the exhibition than in other exhibitions, did they reflect on how their own mind works, and have their beliefs about their minds changed as a result of going through the exhibition?

Methods: There are two parts to the study. (1) Evaluators will conduct a tracking and timing study of visitors as they move throughout the exhibition. This means unobtrusively following visitors and observing their start and stop times at each exhibit within the exhibition. Evaluators will also note each visitor's gender and approximate age. After aggregating the data from many visitors, evaluators will compare the average time in the exhibition to the average times in other, similar exhibitions (as published by Beverly Serrell). (2) As visitors leave the exhibition, those who were tracked will be recruited to participate in an interview. They'll be asked to report their own thoughts as they went through the exhibition, and whether the exhibition succeeded in prompting self-reflection. They'll also be asked about their beliefs about their own mind. Finally, they'll be asked for demographic information such as age, gender, and zip code. No personally identifying information will be gathered.

<u>Interaction</u>: The evaluator will talk with visitors during recruitment and during the interview.

<u>Dissemination plan</u>: The summative evaluation report will be disseminated to the museum staff, the funding agency (NSF), and the CAISE website.