

## **Appendix A: Sample Usability Testing Script/Protocol (Barnum, 2010):**

*Welcome to participant.* NASA Office of Education appreciates your participation in this study. Your being here today will help NASA Education improve the ways in which users are able to access, navigate, and successfully interact with the NIFS-OSSI data collection screens.

*State the purpose of the study.* The purpose of this study is to learn from you what works well and what does not, the reason for conducting a usability test of the NIFS-OSSI data collection screens. The research study team is completely open to anything you might want to share that would help improve the experience of these data collection screens for future users.

*Provide forms required for participation, unless completed electronically in advance.* I have on record that you have already completed your video consent form for the study. The video recording of this session will be used to gather in a form we can analyze what works well and what does not work well as you access and navigate through the NIFS-OSSI data collection screens according to the scenario provided. This video will not be seen by anyone outside of the research group, which includes X, X, X, etc.

*Describe the participant room.* As described in the solicitation for participants, note that there is a video camera posted over your shoulder to capture your efforts to navigate the scenario. Also note, there is an observer who will take notes as well of what she/he sees during the testing.

*Explain the testing process.* I will be asking you to perform some tasks with the NIFS-OSSI data collection screens that are typical of your user role and level of experience. I will be sitting beside you while you move through the scenario, observing what you do and asking for clarification about anything you do as you think out loud during the testing.

*Describe thinking out loud.* I realize that it's not natural to think out loud while working, but doing so will help the team get insight into your experience when you share your thoughts this way. Some examples are, "I like the tabs at the top because they are clearly labeled." "Using the "Description" tab takes me to information I find useful." Or, "I have no idea what this work means..." or "This is not what I expected to happen when I clicked on that link..." My role as moderator is to ask questions or remind you to share thoughts if you become quiet.

*Ask participant to share any questions or concerns.* Do you have any questions or concerns? Are you comfortable? You can stop any time.

*Thank the participant.* Thanks again for participating. NASA Education values your time and efforts in this research study. Are you ready to begin?

*Start the study.* Indicate to the videographer to start the camera. Ask the participant to read the scenario out loud to transition her/him into thinking out loud more easily.

[Testing situation proceeds]

*Thank the participant.* Indicate to the videographer and observer that the session is at an end. Thank the participant for her/his time and effort. Reassure her/him of confidentiality measures. Thank the research support staff for their participation.