OBJECTIVES & GOALS
During facilitated discussions and task analysis, the research team will seek to understand how users interact with the NCSES Data Tool and which workflow paths they take to solve problems. The questions target both process and perception. Insights will be used to prioritize feature recommendations and opportunities for improvement.

APPROACH
The research team will conduct 108 approximately one-hour interviews with candidates identified by the NCSES data team. During the discussion there will be two specific research methods applied:

1. **INTERACTIVE DISCUSSION:** Understand who they are, how they use the tool, types of problems they solve, and opportunities for improvement from their perspective.

2. **WORKFLOW ANALYSIS:** Understand the path users take to find answers to both simple and complex data questions.

FORMAT
This interview guide identifies and details the questions and approach researchers will take during the discussions, but it is not a fixed script. The actual conversation will evolve organically as our interview methodology is built on eliciting deeper insights. Adding or skipping questions might occur based on answers provided by the participant. Conversations will be recorded for the purpose of documentation.

TIME: 50 min
SETTING: Conducted via a video conferencing platform.

EXAMPLE SCRIPT

INTRODUCTION: Introduce research team and describe format for the interview
5 minutes

1. Ask if we can record the session. If yes, **PRESS RECORD.** If no, proceed with the interview.

2. Have everyone in the meeting introduce themselves. Distinguish between usability researchers and data experts, if any.
3. Explain that this is an informal session, no wrong answers. We're trying to gather feedback on how people use reporting tools and specifically, how they would approach using the NCSES data tools   Invite them to relax, be candid and give open honest feedback. Thanks.

INTERACTIVE DISCUSSION I: Use case identification, perspectives
20 minutes

1. Tell me a little about yourself.
   - Where do you work?
   - What do you do?
   - Describe a typical day.
2. How do you use data?
   - Which tools and what do you like about them?
   - What features/functions do they have that you like?
   - What, if anything, prevents you from using the NCSES data tools?
3. Describe the process you take when you are starting your research (or work with data).
   - What do you do first? Second, etc.
   - What is the most difficult part of the process?
   - What is the easiest part of the process?
4. What do you know about NCSES as an organization?
   - If no knowledge of NCSES, skip to Workflow Analysis Section
   - When and how did you first discover them?
   - If you wanted to learn more about the organization, what would you look for?
5. How often do you use NCSES data?
   - If never, move to the Workflow Analysis Section.
   - If not never, continue with questions below.
6. How often do you use the NCSES data tools?
   - If never, move to the Workflow Analysis Section.
   - If not never, continue with questions below.
7. Tell me about how you use the NCSES data tools
   - What questions/problems are you typically looking to answer/solve?
   - Where or from whom do you get these questions/problems?
   - Is your research cyclical (Monthly, annually, etc)?
8. What feature/function do you use most frequently in the NCSES data tools? (data explorer, table builder, chart builder)
   - How often do you use it?
   - Do you remember the first time you used these new tools? Describe the first time you used one of them.
     - How did you discover it in the first place (word of mouth, google search, etc)?
     - What was the learning curve like?
   - Why do you think you use that specific feature most frequently?
   - Which feature do you use least of all and why?

Conclude this section: Great! Thank you for this background information. It's really useful and helps set the stage for our next section. At this time, I'd like to introduce Nick who will be handling the tools section of our discussion today.

WORKFLOW ANALYSIS: user approach, workflow validation
15 minutes

Introduce approach: For the rest of our discussion, we'll be looking at and using the NCSES data tools.

In most cases, we'll look at something and then I'll ask you about what you're looking at. First impressions, what do you think you can do here, etc.

I'll also ask you to try specific tasks on screen, but please wait until I ask you to click before doing so - just so we don't get ahead of ourselves - and so we can keep a consistent approach with all of our interview candidates.

Again, I want to remind you, **there are no wrong answers.** We're just trying to capture your first impressions, opinions and understand your thought process so we can make the tool easier to use for others.

Ok, let's get started. We're going to start on the landing page of the NCSES Data Survey Tools. Click on the link that was in your meeting notice, or type in: **ncsesdata.nsf.gov/home**

[Begin on the NCSES data tools homepage https://ncsesdata.nsf.gov/home]

1. What are your first impressions of the landing page?

2. What do you think you can do on this site? What is the purpose of this site?

3. Is there anything missing that would give a better indication of what you can do?

4. Let's pretend you want to conduct some research on Science and Engineering doctorate recipients. What would you do first?
    a. If they picked **Search** - why did you go there? Is this how you navigate other websites? What drew you to the Search bar vs the topic titles (boxes) below?
        i. **Try it.** Are you getting what you expected to see?
        ii. What do you see here in the drop down? What do you think these results are for?
        iii. If you were to click on one of these, which one would you select?
        iv. If you were to select the first result - what would you expect to see?

v. **Try it**. Was this what you expected?

    b. If they picked **Topic Title** - why did you go there? What would you expect to happen if you clicked the box?
        i. **Try it**. Are you getting what you expected to see?
        ii. Guide them back to the Search Bar and follow steps in "a" above.

5. If you wanted to see more information about Doctorate recipients at a specific university, what would you do first?
    a. If stuck - guide them to Variables tab
    b. Do you see anything here that would help you find information about Doctorate recipients at a specific university?
    c. What would you click?
    d. **Try it.** Do you see what you expected?

6. How was that experience for you? What would have made this task easier for you? What part(s) did you find difficult?

7. If you needed to find other variables that we could combine with this information, for example, if an institution is an Historically Black College or University (HBCU), do you see anything on the screen that helps you know how to get this information?
    a. What would you click?
    b. **Try it** - are you seeing what you expected?

8. How was that experience for you? What would have made this task easier for you? What part(s) did you find difficult?

Thank you! Your input has been very helpful. I'm going to turn it back over to Karen/Janey for our conclusion.

INTERACTIVE DISCUSSION II: Follow up on Workflow Analysis
15 minutes

1. Describe your experience you just had.
    ● What was easy? Why was it easy?
    ● What did you find useful during this process?
    ● What was difficult? What would have made it easier? Where would you expect to see help to guide you along the process?
2. How does this experience compare to experiences in other data tools (e.g., Excel)?
    ● Probe on look and feel of the tool

3. Do you have any questions or recommendations for us?

CONCLUSION: Thank participants and resolve any questions
5 minutes