

GOOD MEASURE INTERVIEW QUESTIONS

Interviewer _____

Note-Taker _____

Date: _____

Interviewee _____ Field of Study/Research: _____

Overall Guidelines:

Interviews shall be kept to an hour.

Opening

1. Introductions. (We are graduate students at the University of Michigan and are..) We'd like to take an hour of your time to ask you some questions specifically about some of the tools and procedures you use to do lab work. Your answers will help us to develop tools to better support these processes.
2. Please give us a quick summary of your research project (in layman's terms).

Communications/Physical Environment

1. What percentage of your time is split between independent or team work?
 - Is your team co-located? What methods do you use to communicate with others in the lab?
 - What parts of the work do you share?
2. While doing independent work, do you share your lab space with others? Could you please show us the space you consider your own if it is nearby? May we photograph it for reference?
3. What are some breakdowns or bottlenecks in communication that slow down your job?
4. How do you receive direct feedback from your manager and/or coworkers?
5. Is all of your work done in this building? Do you ever have to go off site to accomplish any of your tasks?
6. Can you perform all tasks for this process in your office? For example: do you need to go somewhere else to fax something or speak with someone else?
7. Whom do you go to if you need to get more resources (chemicals, scales, etc)?

Work Processes Examined

1. Please walk us through a typical day in your research. What processes are involved in your work?
2. What do you need to prepare in advance? What other responsibilities do you have that may fall outside of (or disrupt) this routine?

From here focus in on specific processes, getting into the work tools.

Note to the interviewee that we are most interested in those process that support preparation for experiments

3. Please use as an example the last time you remember working on a typical experiment preparation task:
 - How often you complete this task?
 - What percentage of your time at work do you spend working on this process?

Work Tools

1. What tools do you use for your work duties? Could you explain how you use these?

(Depending on answer)

- What tools do you use for stoichiometry?
- What tools for preparing recipes?

(ask, if it doesn't come out:)

1. How do you record measurements? Please describe the units, states (solid, liquid) and other defining characteristics of these measurements.
2. How do you calculate how much to use of a particular chemical?
3. Is there any other equipment that you use to accomplish this task? (such as:)
 - calendars,
 - post-it notes,
 - scratch paper,
 - reference books,
 - cheat sheets,
 - other quick reference materials
 - etc.
5. In what circumstances or process stage would you use those tools?
6. What would you say are the process' major problems/issues (deficiencies, inefficiencies)?
 - Specifically, where do you spend more time than you think you should?
 - What is going well with the process? What parts are streamlined and efficient?
7. Are there any specific tools that you would find helpful regarding preparing solutions and during recipe calculation?
8. Are there any other protocols or standards that would make your research more efficient?
9. What information do you think is lacking from the current system that should be gathered?

Knowledge Management

1. Do you currently use any tools for capturing "lessons learned" from your research procedures? Would this be helpful?
2. Have you ever wanted to automate a task, but decided you don't have enough time to do it even though it would be more efficient in the long run? What was the task?
3. Is there any lab documentation that you use? Could we have a copy for our analysis?
4. Are there any standard processes in your lab?
5. Do researchers share common recipes and reagents? How Often?

Other Questions

1. Can you tell us about any software programs you have used that have components you like?

Closing

Thank you for taking the time to meet with us today. Do you have any additional comments or suggestions for our group? What should we have asked that we didn't? Also, we may need to contact you with further questions. What is the best way to contact you (phone,email?)