Research Protocol: Second Draft for 4/16/2020

Taken from provided shared google docs:

Notional Machines: Instructor Strategies for Explaining How Computer Programs Work

Interview Protocol

#### Protocol and Interview guide

My name is \_\_\_\_\_. Thank you for taking the time to participate in our research study. We are conducting a study to examine if **STEM** students are utilizing remote technologies to collaborate with others and their experiences using them.

To facilitate our note-taking for our research study, we are recording this interview to ensure that the best potential feedback is acquired. Any actions taken going forth will be done with this statement in mind. In addition to recording your answers, we may ask you to share your computer screen to demonstrate an activity.

Please note that this interview is **voluntary**. You have the right to not demonstrate any activity, answer any question, or to end the interview at any time. Your answers will be confidential and used only in connection with this research study. Only researchers will be allowed to view your responses to the following questions. This interview should last for about 30 minutes.

Answer any questions

Present information/consent sheet

If the student has given consent, begin screen recording.

#### **Suggestive Prompts**

- Have you used or are you currently using a remote technology (software/application) to collaborate with others for a class?
  - If yes:
    - What technology have you used / are using?
    - Is this technology facilitated by the class / instructor?
      - Did students come together to create it outside scope of class (ie: slack)
    - How long did it take you to become familiar with this technology?
    - What features of the technology did you find useful or helpful?
    - When do you typically use this tool? How often do you use it?
      - Do you use it for general study? Do you rely on it only when stuck? Homework / Labs / Study?
    - Which specific problems does this tool help address?

- Did it solve the problem? Amplify / minimize the problem?
- Did you face any difficulties or obstacles when using the technology? If so, what are they?
  - Did difficulties act as a deterrent? Were they easily solvable?
- Would you be willing to share your screen and demonstrate how you use this tool?

#### o If no:

- What are your general feelings regarding online collaboration for class-work?
- What are your reasons for not using remote technology?
  - Are reasons personal (no interest in group work), or lack of exposure to technologies?
- Have you faced any obstacles when collaborating with other students? If so, what are they?
  - Are past experiences with group work causing an obstacle? Not a lot of experience with group work? Prefer solo work?
- Do you feel any inclination to use collaborative technologies in the foreseeable future (for school / work)?
- Do you feel exposure to more collaborative technologies would make you more inclined to use them?
- Have there been recent scenarios that collaborative technologies would have helped solve?
- Would you like to have more support for collaboration in your class?
  - o If yes:
    - What new methods for supporting collaboration would you like to see?
    - If there is a technology you would like to see, what features would you find helpful?
      - New features or old features that may have been removed
    - Are there any current methods that you feel are ineffective / detract from the collaboration of your class?
  - o If no:
    - What current methods for supporting collaboration are successful in your class that ensures no more support is needed?
    - Do you feel other classes might need to have more support for collaboration?
- Do you have any questions or comments you'd like to share?

Thank you for your demonstration of your collaborative technologies.

#### [if recorded]

- Would it be ok if I share the recording with colleagues and audiences for education and research purposes?

## [if yes]

 Thank you for your consent. When I share the materials, would you like me to include your name with the recording? [note answer for sharing recorded content]

# [if no]

- May I share your answers to the questions provided that I remove any identifying information from your answers? [note answer for sharing written content]

## [if not recorded...]

- Situation to be discussed

#### Notes from 4/9/2020

- Put information about recording & consent, then later put into information sheet
- Zoom will make transcripts (transcripts will be for personal notes then will be deleted?)
- If do not want to be recorded, ask if they want to be interviewed anyway
- Edit any passive language
- Don't use as wordy language
- Review if guestions are outside the scope of research objectives ( See Research Guide )
- Half dozen high level questions, then optional questions if detail was not provided