

Getting Started + Advice

36-726 Spring 2020

Objective

In some cases, there are well-defined goals for a project and in others the problems are open-ended. Don't worry about the lack of precision; we are available to help you sharpen the focus of a project where this is required. In some cases, the investigators are very statistical or have statisticians on their staff. Having a statistician to turn to (other than the faculty advisor) is both good and bad. Some projects may require more "sophisticated methods" than others. **You won't be judged by this as much as by what you did for the client in shaping their problem and answering their questions.**

This week

Your first task is to schedule a meeting with your investigator. At the end of this class, meet with your project partner(s) to discuss availability and come up with a draft email to your investigator proposing times to meet. **This will be a Canvas assignment, due tomorrow morning at 9 am; do not send until the supervisor has had a chance to add their availability.**

Hopefully, you can arrange this meeting with your investigator before the end of next week. Let your faculty advisor(s) know if you are having any difficulties in this regard. We are planning on attending at least the initial meeting. In general, please cc your faculty advisor on your email communications with your investigator.

During class on **Wednesday, Jan 29**, Joel will lead a discussion about ethics.

During **36-612 this Friday, January 31**, we will have a workshop on Team Dynamics: Part 2, led by Joanna Wolfe. There is an assignment that must be worked on as a team before this class.

Next week

Meet with your investigator.

During class on Monday, Feb 3rd, we will have a presentation from Sarah Young, Senior Librarian, on performing academic literature reviews and an overview of the CMU Libraries resources available to you.

First practice talks starting Monday, February 10

You should have met with your investigator, agreed upon a set of goals and begun to look at the data. In class, each team will give an approximately 10 minute (3-5 slides) oral report on this and any progress they have made, as well as prepare a written overview of the project and statement of the agreed upon goals.

We will have four groups presenting during each class session on Feb 10th, Feb 12th, and Feb 17th. The schedule will go out around Feb 3rd, and each group will turn in their slides 48 hours before their initial presentation.

Some Practical Advice

In your project, you are taking on a new role with which many of you are unfamiliar: you are working as a kind of collaborator with the investigator who brought his/her project to the class. This is a **professional** relationship: you must show appropriate courtesy, respect, and etiquette in all aspects of this relationship. That means both **social courtesy** and the **intellectual respect** of both working hard to understand what your collaborator (the investigator) wants and needs, and communicating clearly and courteously your best advice, feedback and analysis for the project.

Please note the following guidelines for working with your collaborators:

1. Some projects may naturally lead to more frequent meetings but you shouldn't meet any less than once a month. Be sensitive to the schedule of your collaborators, in frequency of meetings (and all things). Consult your faculty advisor(s) about the frequency of meetings.
2. Schedule meetings well in advance. ALWAYS be up front, courteous and flexible about scheduling meetings, and ALWAYS be on time for meetings. Take notes.
3. Be professional, polite and courteous at all times in meetings (with your teammates, and with your scientific collaborator). Your collaborators are accustomed to and are expecting professional collaborators. This doesn't mean you should be meek. It means you should be socially graceful. For example, it is possible (and necessary, across scientific and academic cultures) to be graceful while digging to get to the bottom of an intellectual, organizational or other question.
4. ALWAYS have paper and pencil out during meetings, and ALWAYS be taking copious notes. (A lap top may be perceived as putting a barrier between you and the client.) Scientists and other professionals love to talk about their work, so you won't have any trouble getting them to talk. Afterwards, study and organize your notes, so you know what to follow up on (or not) in future meetings, email, phone calls, etc. **Your collaborators are likely to get impatient if they have to give the same lecture twice or three times.** On the other hand, engaging an old issue with new or deeper questions or in new directions is an activity your collaborators will enjoy, and is an important role for a statistical consultant to play.
5. It is good practice to keep a record of each of your meetings with your investigator and your team meetings. By this we mean notes of what was discussed, e.g.,

Investigator described the study - randomized controlled trial with 3 treatment arms. Tx 1 was..
Primary question of interest is...
etc;

and action items, i.e., things that need to be done, e.g.,

- a. Action Item: Investigator will provide an article describing the disease.
- b. Action Item: Investigator will provide a list of the variables in the data set with codes

Many scientist/consultants keep these sorts of notes in a bound notebook, like a lab notebook. After each of your meetings with your investigators you should share a copy of these notes with your faculty adviser.

6. Find out how your collaborators like to communicate between meetings. Some are more tuned to email, some are more tuned to the phone. Be sensitive to how often your collaborators want to be contacted between meetings. Some people like questions saved up in batches that only come occasionally, others like to address each little question as soon as you think of it. People who like one style typically don't like the other. Be flexible yourself and adapt to your collaborator's style. Always feel free to come talk to one of us about any aspect of the project. We will set up regular meetings, but don't wait for our regular meeting if you are concerned or uncertain about anything (social, scientific, statistical, etc.). Drop by or send an email. If one of us doesn't know the answer we'll help you find it.