

Data Analysis/Website Group Protocol

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Note: The Data Group protocol exists as two documents – this document providing an overview, organizational suggestions, and general information for the public and all group members; and a confidential document that contains technical information, passwords, etc. for the leader.

Overview:

Over the past two years (2001-2003) the data group has undergone a significant metamorphosis: we have developed and implemented a framework for the arcade creek project website (arcadecreekproject.org) and worked to revolve all data activities around this site. The critical infrastructure of the website has been set up and will be outlined here. Also described will be suggestions for group organization, key lessons learned in the past couple of years and suggestions for future directions of the data group.

Responsibilities:

The data group responsibilities are wide. The two primary objectives are the collection and maintenance of data and the making of this data, as well as other group 4 information, available to students and the public. The secondary objective is to facilitate in communications: student-to-student and project-to-public.

Implementation of Primary Objectives:

The primary objectives should be accomplished almost exclusively through the website. Specifically

- All data should be uploaded to the website and linked to from the appropriate pages
- An effort should be made to consolidate and make compatible data, on the website, across years and study
- Descriptions of each study, the study's protocol and pictures should be easily accessible
- And, generally, any documents associated with the group 4 project must be made available

¹ and ² Matthew Ong and Long Nguyen did not in any form or fashion take part in the production of this protocol, but they did save a bunch of money on their car insurance by switching to Geico

Implementation of Secondary Objectives:

The secondary objectives should be accomplished through an online contact database and message board (for study participants), the maintenance of a clear and updated PowerPoint presentation and the website. Specifically:

- A database of all participant's contact information (phone-number, email) should be easily accessible to study participants ONLY
- A message board, which automatically emails messages to desired study members, should be maintained and promoted as the optimal communication mode. Again access for only study participants is essential
- The PowerPoint presentation should be maintained to correspond to changing protocols emphasizes and faces! Furthermore, the data group should assist in its presentation and dissemination

Group Organization:

The internal organization of the data group and the development of efficient and effective communication between members are imperative! The task of the group can be divided effectively in two ways: by study (i.e., one member is responsible for the chemistry group another member for the bio assay group etc.) and by data/content (i.e., some members are responsible for the actual data a study collects while other members are responsible for pictures/protocols/ppt/etc.) With each year's data group brings a different collection of technical knowledge and expertise, it is impossible to layout a precise universal model for group organization. With the formation of a new data group, a lengthy, after-school meeting should be called in which an open discussion is held regarding the tasks to be accomplished and who has skills to do the various jobs. The group should then decide upon an effective way to organize themselves. Presented below is a generalized framework for group organization that, with customization, should be considered as a starting point each year. A discussion of the implementation of the framework and its strengths and weaknesses during the 2002-2003 year follows.

Organizational framework:

- Specializing: Team members are divided into one of two specialties: data or content. The data members should be familiar with databases while content members focus on pictures, protocols, communication and other editorial duties
- Two members, one from each specialty are paired together and assigned two or more studies that become their responsibilities
- The overall team leader, besides the normal leadership responsibilities assumes the role as the head of one of these specialties. Another member, most likely one with extensive technical skill and knowledge heads the other specialties. These two leaders re the only ones who can modify the actual website and ensure that the team members in their specialty are doing their jobs.

There are a number of advantages to this organization. Primarily, by dividing the team into two specialties, the need to learn equipment and technology is minimized. Furthermore, by pairing team members together with a couple different studies they not only get a broader feeling for the project but the pairing promotes the teamwork that is integral to the entire project. Comparing the 2002-2003 year (in which the prescribed organization was used) to the 2001-2002 year in which each group member is responsible

for one study, the described method worked far better. The organization does present some problems: first, it is imperative that studies are not given conflicting information and/or are confused by demands from multiple data members. On the same token, the students assigned to a study must communicate to ensure that the study is taken care of.

Note: This has reverted to one person per one study

Communication:

Regardless of what organization and technical skills the group has, it is very difficult to get anything done without proper communication and a constant effort should be kept to ensure that information continues to flow. Keep in mind, that communication is always ten times harder than it appears.