

Practical: Field diary and Lab record

The field diary is the basic document which contains all the data collected. Facts and interpretations are to be written separately and conversations to be noted in the vernacular *local* languages. Two kinds of field notes/diary are to be observed:

- a) Taking notes on the spot
- b) Writing detailed diary

Field diary

It is instructed to write the field diary everyday in which, detailed notes of observations, field notes on discussion and conversations and specific details of special events should be entered.

Field diary for Research Process documentation

The documenter uses a field diary to record his or her observations and thoughts in an orderly fashion. Recording observations and impressions enables a researcher to pick up clues about how the system is operating.

A field diary should help the investigator understand the systems physical and social setting. It should help describe who, what, why, where, when and how. There is no special format in writing a field diary but entries should be written daily in chronological order so information is not forgotten or changed. The critical concern is that observations are recorded in a diary regularly.

Diary content should be organized into two categories.

1) Observations

2) Impressions *विचार.मट*

Observations should be **goal-oriented**; the documenter should only write down what she/he actually saw or heard. Observations include descriptions of the physical setting (Climate, geographic area and resources), the demographics settings (movement and general characteristics of people) and the organizational setting (the different social levels in the system, the communication network and the degree of complexity in the social system).

The researcher also observes individuals, small groups, families, villages and government organizations. Observations can be made of situations and human actions, including action between farmers and government agencies and between different government agencies.

The subjective impressions of the documenter make up the second category in a field diary. Impressions should be clearly differentiated from observations. If for instance the researcher observes a bitter argument between two farmers about water distribution in a canal, she/he should write down what was actually seen and then write down his or her own impressions of the vent. Impressions are important because they help the researcher evaluate and give meaning to the observations. Thus, impressions should be recorded for all observations. As a result of recording impressions, new ideas may emerge that may lead to a better understanding towards the system.

Laboratory record

Guidelines for Keeping a Laboratory Record

The following is a general description of how to keep a proper laboratory notebook. Requirements for different teaching, research, clinical, or industrial labs will most likely vary. Some institutions/labs will require less stringent record keeping, others will hold you to a very

strict protocol. A well kept notebook provides a reliable reference for writing up materials and methods and results for a study. A comprehensive notebook permits one to reproduce any part of a methodology completely and accurately.

Choosing a notebook

For most purposes you may select a bound notebook, quadrille-ruled. A teaching lab may require tear-out duplicate pages for making carbon copies. An engineering or industrial research/development lab will likely require a specific type notebook with pre-numbered pages and places for date and investigator's and supervisor's signatures on each page.

Preparing the Notebook

Please use a ball point pen for all entries, so that the marks will not smear nor will they be erasable. Put your name, a telephone number and/or address, and project name or course number on the outside front cover of the record. Put that same information on the first page inside, or on the inside front cover. If your notebook does not include a pre-labeled table of contents section, then reserve the next several pages for a table of contents by labeling the top of each page as Table of Contents and numbering each page.

What to enter

Above all, it is critical that you enter all procedures and data directly into your notebook in a timely manner, that is, while you are conducting the actual work. Your entries must be sufficiently detailed so that you or someone else could conduct any procedure with only the notebook as a guide. Few students (and not that many researchers for that matter) record sufficiently detailed and organized information. The most logical organization of notebook entries is chronological. If a proper chronological record is kept and co-signed by a coworker or supervisor, it is a legally valid record.

4 } We usually record a lot more information in a laboratory notebook than we would report in a research paper. For example, in a published article we don't report centrifuge type, rpm, rotor type, or which machine was used. However, if a procedure is unsuccessful you may want to check to see that you used the correct rpm or correct rotor. Perhaps the centrifuge itself was miscalibrated. You would need to know which machine you used. In a research paper one does not report which person performed which tasks, because such information is useless to a third party. However in the notebook it is important to note who was responsible for what procedure. Again, you may need such information to troubleshoot your experiments.

Making entries

Someone else may need to consult your notebook sometime, so ^{you should} please make your entries clear and legible. When you make your first entries of the day, start by entering the date, writing out the month or abbreviation for the month (e.g., 5 Apr '04, or April 5, 2004, but not 4/5/04).

When you start each new page of a notebook enter the date next to the page number. Each page should be numbered and dated consistently. Most of us use the upper right corner of each page for date and page number.